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# ***JPRS Report***

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# **China**

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## NOTICE

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# China

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## NATIONAL AFFAIRS, POLICY

### Reform of Price, Property Right System

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[Article by Tian Yuan (3944 3293) of the Economic, Technological, and Social Development Research Center of the State Council: "Price Reform and Reform of the System of Property Right—written in January 1988"]

[Text] Editor's note: This article contains the theoretical conclusions of the price unit of the State Council's Economic, Technological and Social Development Research Center. Those taking part in the research and the discussions on the article included comrades: Jiao Gang (0829 0474), Dai Guiqing (2071 0948 1987), Lin Poqin (2651 0130 0530), Liao Yingmin (1675 5391 2404), Zao Wosheng (1563 3087 3532), Li Yanyang (7812 5333 7122), Wu Xingzhou (0124 5281 3166), Li Youpeng (2621 3945 7720), Chang Qing (1603 3237), and Wang Yukun (3769 5148 3824), Li Xiaoxi (2621 2556 6007), Jia Suying (6328 5685 7336) and He Dao-feng (0149 6670 1496). [end editor's note]

Price reform is an important content of the reform of China's economic structure, and the changes in interest relations it brings about touch each and every corner of economic life. Hence, it is necessary to carry out an intensive economic analysis into the series of important problems touched on by price reform.

## I

### Progress and Effects of China's Price Reform

Since China began in 1978 the discussions on the enforcement of price reform, to date two developmental stages have been transited. The first stage was from 1978 to 1984. During this period, the method adopted in price reform was a government "simulated market," whereby the state's commodity price departments decided to raise the prices of commodities, the supply of which lagged behind demand and lower the prices of those commodities whose supply exceeded demand so that the planned prices of a portion of the commodities tended toward balanced prices. This principally included raising to a large extent the purchase prices of agricultural and sideline products, raising the sales prices of eight kinds of subsidiary foods and their products, raising the price of cotton cloth, lowering the price of chemical fibre cloth, lowering the prices of wristwatches and radios and so forth. Price reform entered the second stage in 1985. During this period, the method employed in price reform was that of the "simulated market" whereby the government readjusted the prices of those commodities whose supply and demand were not balanced and also the "Lange model" (Footnote 1) (the "Lange model" is a method to seek rational pricing under the principle of recognizing the precondition of a basis of a rational

allocation and disposition of resources; Lange believes that a typical socialist economic pattern, under the conditions of the existence of a consumer-goods market and a labor market, can realize economic equilibrium through simulating the market by the trial-and-error method to determine prices and the government attending to the planned regulation), which drew the market mechanism into the process of formation of the prices of means of production, liberated in different ways and to different degrees the prices of a number of means of production products and formed a new mechanism whereby in the same category of products the portion inside the plan would enforce the state's fixed prices (low prices) whereas the portion outside the plan would enforce the market's fixed prices (usually high prices).

Summing up, we may say that the progress and effects of price reform are principally shown in the following four directions:

First, the price structure tends to equilibrium but there is still the problem of the prices of certain departments being seriously imbalanced.

At present there is still no intensive research on how to measure the progress and extent of the rationalization of prices in a given period. In our opinion, after studying the trend of price movements in China it can be seen in general that price rationalization, that is, movement of prices toward equilibrium, is in reality manifested by a rising trend in the level of the profit and tax rates on capital funds of departments whose prices tend to the low side and, in the event of contrast conditions, by a falling trend; hence, we can use the disparity degree between the capital funds' profit and tax rates in the various economic departments of society and the average profit and tax rates on capital funds in society (ratio between the weighted mean square deviation and the averages of the profit and tax rates on capital funds of the various departments that is, the deviation coefficient) to more or less gauge the conditions of the price system moving to a state of equilibrium. Based on this analysis, we have made a statistical study of data from 27 departments other than agriculture and have found the following results:

1. In the process of the price reform, due to the effects of an extremely small number of departments, the non-equilibrium degree of the entire price system showed a slight increase but after eliminating certain industries and trades whose prices inside the plan seriously tended to the low side or whose losses were of a policy nature, the whole price system showed an obvious tendency to equilibrium. The results of the estimates were: in 1978, between the profit and tax rates on capital funds of the various departments and the average figures, the deviation coefficient was 110.16 percent and in 1985 it was 140.48 percent. If from the above-mentioned 27 departments the 5 departments of coal, supply and marketing, grain, foreign trade and machine-building not under the system of the First Ministry of Machine Building whose



deficits and losses of a policy nature were relatively large, are removed then it can be found that the degree of the twisting of prices was somewhat improved. Thus, still using the average profit and tax rates on funds as the basis and after removing the deviation coefficients of the above-mentioned five departments, in 1978, the deviation coefficient was 90.97 percent, in 1983, 63.80 percent and in 1985, 78.51 percent; of these, for 16 industrial departments in 1978 the deviation coefficient of the profit and tax rates on funds was 91.81 percent and in 1985, 89.79 percent.

2. Looking at the departments separately, in the great majority of the departments profit and tax rates on funds ended toward average. The situation of the prices of the communications, energy, and raw materials departments tending to be low and of the prices of the processing industries tending to be high seemed to have been improved but was not basically solved. In 1978, the prices or charges of communications, posts and telecommunications, raw materials and energy (principally coal) were seriously on the low side. Following price reform, by 1985, apart from the prices of coal produced inside the plan that continued to tend to the low side, the prices and profit and tax rates on funds for communications, posts and telecommunications and raw materials had been somewhat raised and in the case of the textile and light industries the profit and tax rates on funds tended to approach the social average level. However, seen as a whole, the problem of the prices and profit and tax rates on funds of the processing industry department tending to be high and the prices and profit and tax rates on funds of the energy, raw materials, and communications departments tending to be low still existed. According to the listing order of the funds' profit and tax rates in 1985, the profit and tax rates were still high in processing industries such as motor vehicle, petro-chemical, light industry, pharmaceutical and machine building while in the case of energy and industries producing primary-grade products such as coal, electric power, timber, post and telecommunications and nonferrous metals the profit and tax rates were still low.

Second, the degree of the economy's trend of developing markets has heightened gradually.

The targets of the reform of China's economic structure are to establish markets for planned regulation and to allow the markets to guide the structure of the enterprises. Hence, formation of markets is an important content of the reform of the economic structure. The conditions for realizing these targets, aside from relinquishing the mandatory planned control over the great proportion of products, also demand the removal of price control and reduction of the government's indirect control over price. Since 1978, important progress has been made in this regard. According to the statistics, in the gross volume of agricultural products sold by the peasants, the portion sold at the state's fixed prices was 92.4 percent in 1978 but dropped to 36 percent in 1986 and the portion sold at the state's guided prices and the

market's regulated prices was only 7.6 percent in 1978 but rose to 63 percent in 1986 of which the portion sold at the state's guided prices was 23 percent and at the market's regulated prices, 40 percent; as for the major means of production and computed on the basis of sales volume, the portion sold at the state's fixed prices dropped from nearly 100 percent to 64 percent, with the portion sold at the state's guided prices being 23 percent and the portion at the market's regulated prices, 13 percent; on the side of industrial consumer goods, in 1986, the portion occupied by the state's fixed prices was 45 percent, that by the state's guided prices, 23 percent and that by the market's regulated prices, 32 percent. It must be pointed out that the above-mentioned statistics included certain indefinite factors and that the principal one was that after a certain portion of the products had been withdrawn from the state's fixed price scope, their prices again came under the control of the local governments at various levels, thus failing to form the mechanism of market fixed prices. This is a new problem that needs to be solved in price reform.

Third, distribution of regional benefits tends to become rational.

Since the problem of the price system being irrational reflects the irrationality in the distribution of regional interests, it implies that the process of price reform is also a process of readjusting the regions' economic benefits. Due to the extremely complex nature of the conditions of exchange of products in the various localities, it is practically impossible to compile statistics on price changes which are itemised quantitatively. Our use of the data of constant prices in 1984 and 1985 in the various provinces and cities and their existing prices in carrying out the statistical analysis enables us to more closely examine the changes in the interest structure caused by the reform.

Among the industrial departments, if a listing is made according to the sizes from large to small of the ratio of net income from increased prices in the net output value, then a more or less similar distribution is shown between the years 1984 and 1985. The special feature was that the central region was placed higher than the western region while the western region was placed higher than the eastern region. The basis for the transfer of the interests between the regions was due to the differences in economic structure and the readjustments made in the price structure, that is, because of the price increases in energy and in raw materials, income of the eastern sector which depended mainly on the manufacturing industries or the processing industries was relatively reduced whereas the income of the central and western sectors which depended mainly on the energy and raw materials industries and the basic industries was relatively increased.

Among the agricultural departments, due to the extremely uneven distribution of the increased benefits from price factors, if a listing is made in order of the sizes of the ratios of the net income from increased prices after

deduction of the increased cost due to price increases of the materials consumed in the net output value at that year's prices, it is found that the ratio in the eastern sector was much larger than the central sector and that the ratio in the central sector was noticeably higher than the western sector. The causes for such results were principally due to the differences in the structure of the agricultural products and in the scale of the price increases of different agricultural products. As a result, the price index of agricultural products in the economically developed eastern sector was higher than that in the central sector and that in the central sector was higher than that in the western sector.

Fourth, a strengthened posture has appeared in the allocation system of resources.

Because price reform has definitely reduced the degree of price twisting, the allocation or distribution system of resources has developed a strengthened or superior posture, mainly manifested in increases in investments in the initial-grade industrial departments making a start. In 1985, there were 30,000 newly established heavy industry enterprises with the metallurgical, nonferrous, petro-chemical and building materials industries gaining respectively as follows: 816, 642, 5086 and 4144. Capital construction investments in the metallurgical industry increased by 11.4 percent over the preceding year and the increases in the chemical and building materials industries were respectively as follows: 50.5 percent and 64.2 percent. In 1986, the proportions of investments in the raw materials and energy industries rose steadily, the proportion of investments in the raw materials industry rose from the 14.7 percent of the preceding year to 15.9 percent and that in the energy industry increased from 21.5 percent to 21.8 percent. The renovation and transformation investments in the metallurgical, chemical, nonferrous metals, building materials and petro-chemical industries of the raw materials group of industries increased by 41.2 percent over the preceding year. Moreover, seen from the condition of production growth, in recent years the energy and principal raw materials industries have all along maintained a relatively rapid growth rate. In 1986 production of such principal raw materials as steel products, sulfuric acid and cement increased over the preceding year respectively by 9.8 percent, 11 percent and 10.7 percent while electric power generation increased by 9.4 percent. Conditions of this kind show that resources allocation in the macroeconomic sector is being rationalized.

Having analyzed the facts mentioned above, it can be seen that price reform has achieved an important development, improving the allocation and distribution of resources and facilitating economic development and reform of the economic structure. However, there are still many price problem urgently awaiting solution. This is the main basis and the basic viewpoint in our evaluation of the price reform.

## II

### Analysis of the Causes of Stagnation in Price Reform

From 1978 to 1984 the price reform was mainly carried out in the realm of purchase and sale prices of agricultural and sideline products and this has played an important role in improving the allocation and distribution of agricultural resources. Following the CPC Central Committee's "Decision on Reform of the Economic Structure" in October 1984, the major work on reform of the economic structure was shifted from the rural areas to the urban areas and price reform also urgently needed to be shifted to the means of production sector of industrial products. However, the actual process has not followed such a logical development. In 1985 the center of the reform was still reform of the purchase and sales system of agricultural products and reform of the prices of subsidiary food products while the method adopted for the prices of the means of production of industrial products was merely liberalizing the prices of the portion outside the Plan and the legal status of the double-track system was recognized. In 1986 the general body of the reform of the economic structure followed the "marking time" guideline and was anticipating the emergence the following year of a comprehensive coordinated reform comprising prices, taxation, finance and currency, with the reform of the prices of the means of production as the center. However, due to information from various sides reflecting that the enterprises did not possess the capacity to "digest" and bear the influences of the rise in prices and also as a result of the appearance of unexpected financial difficulties, in the end the program of all-round reform was shortened into a reform program on unitary products, the idea of reform of the prices of means of production was wholly abandoned, and a shift was made to enforcement of the contracted operation responsibility system with invigorating the enterprises as the center.

Why did price reform stagnate in the face of reform of the means of production? Obviously there were many causes. One cause that can be more easily seen was first, the disadvantageous macro-economic environment. Due to the state's ineffective control over total demand, too many banknotes were issued and an environment of currency inflation "drawn by demand" was formed. This provided beneficial conditions for the enterprises to take turns at repeatedly raising prices and clearly added to the difficulties of reforming the prices of the means of production. In addition, in the process of research on the program of economic reform, the defects in the guiding thought of price reform were also disadvantageous to promoting the price reform. These defects were centrally manifested in the concept of the role of price reform, and in failing to treat price reform as a condition for realizing the rational allocation of resources, but in taking price reform as a measure for "market formation." Subsequently, due to discovering that readjustment or liberalization of prices could not form the markets as people had anticipated, the tendency to belittle price reform was

generated, particularly taking lightly the basic methodology of the government simulated market—readjusting the market structure. This kind of theory and its actual practice basically misinterpreted or missed the significance of the independence of price system reform in an economic of separation of powers. In the final analysis, reform of the price system is not to serve the intermediate target—market formation—of reform of the economic structure. Rather, it directly serves the target sought in the reform of the economic structure, that is, improvement of the allocation of resources. The latter target obviously demands that a realistic price should rapidly approach a price which can balance supply and demand.

Despite the fact that the above-mentioned cause could impede, or play a passive role on, reform of the prices of means of production, we should not overestimate them, because even if they did not exist price reform could still stagnate and not succeed at one stroke. In reality, the real impediment to price reform did not lie in people's subjective understanding but in the existing economic structure itself and its directly perceived manifestation that the enterprises lacked the ability to stand the effects of the rise in the prices of the means of production or to meet the accompanying financial difficulties.

The main points in reform of the prices of the means of production are raising the prices, or charges, of energy, raw materials, electric power and communications and transport. According to a survey conducted by the relevant departments, in 1985 although no large scale price readjustment was effected, and only the prices of out-of-plan means of production of relatively small proportions were liberalized, the price index of heavy industrial products rose by 11.25 percent. Of the 414 kinds of heavy industrial products, the scale of the rise in price of 182 kinds exceeded 10 percent of which 37 kinds exceeded 30 percent such as timber (35.28 percent), refractory brick (35.26 percent), pig iron (30.67 percent), steel ingots cast in ordinary carbonated steel moulds (42.33 percent) and superior-quality steel ingots (34 percent). Of the 414 kinds of products, 351 showed price increases. The extent of the price rise was 84.8 percent and the price rise level of raw material products was 89 percent.

Rises in the prices of means of production of industrial articles caused a large scale increase in the cost of production. According to a survey in 1985 and 1986 in Jiangsu Province, the production cost in industry rose noticeably, being respectively 8.86 percent and 9.63 percent. Of this the price increase in raw materials caused the cost of production to rise by respectively 5.30 percent and 5.33 percent, accounting for 60 percent and 55 percent respectively of the total increase in the cost of production. In addition, the finance department of Jiangsu Province conducted a survey of 1973 enterprises engaged in the processing industry and found that in the increase in production cost due to the rise in the prices of

raw materials, the proportion occupied by metallic materials was 74 percent, that by electric power, 17.8 percent and that by fuels, 8.2 percent.

The rise in the prices of the means of production for industrial products and the consequent increase in production cost had extensive effects on the enterprise layer of our country's economy. Generally speaking, in these changes in price structure mainly those enterprises in the initial-grade industrial production departments benefited while enterprises of the processing industrial departments were subjected to pressure and incurred losses.

In the past, our economic scholastic circles thought that realization of such price changes would be relatively easy and believed that only the transfer of profits between different departments would be involved, that through price changes pushing along changes in the cost of production and the profit and interest rates, departments producing means of production whose prices inclined to the low side would have their profit and tax rates raised whereas processing industries departments whose prices tended to be high would, because of the increase in the cost of production, find their profit and tax rates lowered, thus evening up the profit and tax rates of the various departments and prices. In reality, it is rather difficult, based on this supposition, within a short period of time to achieve the averaging up of the profits of the various industrial departments by means of price changes. The crux of the problem does not lie in the laxity or not of the macroeconomic environment but in the actual organization structure of the enterprises in our country.

In relatively standard commodity economies, putting competition into full play and enforcing unified market regulations have enabled the development of the organizational structure of the enterprises to possess the same nature, that is, in the enterprises producing the same kind of products in the various departments their production tends to be of the best model. Although among the various enterprises there may be disparity in the cost of production due to different management levels and business environments, yet competitive mechanism, merging and amalgamation mechanism and extensive investment opportunities will form a powerful but gradual natural selective process: Any enterprises which can provide and sell products and labor services which are cheap and of good quality can always defeat an opponent with relatively low efficiency and can thus develop and expand while the opponent will either be forced to make the necessary changes or to disappear altogether. Research conducted by international economic circles on enterprises in the United States, England and other countries has confirmed that this process displays a definite degree of regularity in statistics.

The organizational structure of enterprises in our country is very different from that of enterprises in relatively standard commodity economies, because the two confront extremely different production environments. In



our country's economy, because the government determines the prices, a larger profit rate does not necessarily reflect a higher efficiency rate and the fact that the profit earning rate of certain industries and trades is high does not imply a high efficiency rate on their part; conversely, the low profit earning rate of certain industries and trades and enterprises may not necessarily be due to their low efficiency rate. In the process of economic development, the seriously low prices of communications, energy, and raw materials and the high-level prices of products of the processing industries under government control have artificially lowered the cost of industrial investments and the cost of production of the enterprises. Under such conditions, in the past in our country enforcing the industrial development guideline of concurrently setting up large, medium-sized and small enterprises, plus the encouragement of letting the localities tend toward self-supply and self-sufficiency, made many industries and trades, particularly the processing industrial departments, develop many enterprises which were next to the best model in varying degrees, that is the so-called "redundant construction." By so doing, the production cost of different enterprises producing the same kind of products naturally varied greatly one from the other, forming an enterprise organizational structure of a sort of "ladder-shape production cost." On the basis of the "ladder-shape production cost," similarity in prices made the actual tax-bearing level of different enterprises exhibit an "inverse ladder-shape distribution," with the tax-bearing level of enterprises with low production cost and good benefits being high and the tax-bearing level of enterprises with high production cost and poor benefits being low. Though protected in this way, even among the industries and trades producing high profit-yielding products 4 to 5 percent of the enterprises have customarily been found to have incurred losses whereas in the case of industries and trades of a medium-level profit yielding rate, larger losses have been incurred.

In the traditional economic structure, this type of enterprise organizational structure is in reality subjected to the protection of governments at various levels, and enterprises with high production costs and enterprises with low production costs can peacefully coexist and obtain joint development. This type of enterprise organization structure is an important cause for the allocation benefits of our country's resources being low for a prolonged period. Since, as the saying goes, "those tying the bells must untie the bells," the alternative for improving the enterprise organization structure lies in rationalizing the prices system—raising the prices or changes for communications, energy, and raw materials which have tended to be very low.

However, unfortunately the long-term twisting of the price system has built up an impediment to its own rationalization and in reality the existing enterprise organizational structure resists the rationalization of prices. The contradiction between the two as already fully revealed in the initial stage of the practice on price

reform of industrial products. The rise in prices of means of production for industry immediately pounded at the enterprises and in the process of a general rise in the production costs of processing industry enterprises those enterprises with a relatively high production cost and a low efficiency rate suffered most from the force of pressure on our country's existing structure and the ossifying of the enterprise organizational structure could not possibly eliminate the backward enterprises but rather aroused strong opposition to the price reform. This was centrally illustrated in those regions and industries and trades which had the largest number of products subjected to price increases universally reflecting an inability to digest or to bear the developments. They strongly demanded that the financial authorities make suitable amends to protect their vested interests. At the same time there were few cases of enterprises going bankrupt or having to stop production because of this. From this it can be seen that the rise in the prices or charges in the energy, raw materials, and communications sectors did not cause any stir in the irrational enterprise organization structure.

In the course of the price reform, improving the enterprise organizational structure never was the target of the reform policy. What the central government was principally concerned with was the readjustment of the price structure, that is, raising the prices of the means of production for industry and at the same time stabilizing the prices of the products of the processing industry and for this reason urged the enterprises, through improving efficiency and lowering consumption, to internally offset the effects of the price increase in the means of production. Such expectations basically have not been realized. On the part of the enterprises, after suffering the effects of the price increases in the ingredient products, they found that the yield from improved efficiency and reduced consumption was hardly sufficient to compensate for the rise in the cost of production. In which case, the enterprises usually could not sacrifice the interests of their staff members and workers by reducing the welfare funds and the encouragement and award funds. Rather they shifted the great proportion of the effects of the price rise in the input materials outward via two channels. One such channel is to raise the prices of the enterprise's own products and thus shift to other enterprises the effects of the price increase. For example, in 1986 local industries in Jiangsu Province relied on lowering consumption and expenses to digest 401 million yuan of adverse effects from price rises, relied on increasing the output of products to increase income by 467 million yuan and relied on an increase of prices to shift outward as much as 1.404 billion yuan, thus averaging a rise of 4.79 percent in the ex-factory price level, and forming the proverbial situation of "the boat goes up when the river rises." The other channel is to shift the effects of the price increase to finance. In 1986, due to large-scale increases in the production cost of the enterprises and a large increase in the scale of tax reduction, the total volume of tax reduction in Jiangsu Province amounted to 12.6 percent of the financial receipts. The

cause of this was that the existing financial and enterprise management systems found the enterprises and local government departments at various levels closely together making them form a unified body with common interests. Hence, when the enterprises were unable to bear the effects of the price increase, they would naturally seek help from local finance in the form of tax reduction or concession of profits or even subsidies. At the same time, the system of percentage retention of receipts between the central and local governments enabled local finance to further shift the losses from price increase to central finance, reduce the amount of revenue delivered to central finance or change their retention ratio. By means of this sort of chained transfer, the effects on the various kinds of enterprises, particularly the backward enterprises, of the force of pressure of price reform were linked together with the receipts and expenses of state finance and the larger the steps taken in price reform, the more the enterprises' transfer of the effects and the greater the reduction in the state's financial receipts. In reality, this was a kind of "revolving" mechanism, that is, the central government's decision on price reform reduces the central government's financial receipts and makes the central government bear the political risks of the price reform. Obviously, under such conditions, reform of the prices of means of production cannot make any substantial progress.

Up to now reform of the prices of means of production has been carried out on the basis of the double-track system. An important defect of this type of reform is that there is no way to complement it with a readjustment of the tax burden of the industries and trades. If it is possible to accomplish the feat of "price and tax moving jointly," and simultaneously with the price increases in the energy and raw materials industries and trades reducing the taxes on the processing industry, then we can reduce the force of pressure on increasing the cost of production of the enterprises and the accompanying poundings from price increases. Unfortunately, a study of the reform program, and an estimate and actual survey made thereon have shown that despite making a suitable readjustment of the tax burden of the industries and trades it is still not possible to solve the contradiction between price rationalization and the enterprise organizational structure of the "ladder-shape type of production cost."

The reason why reform of the prices of means of production cannot take large steps forward is in reality not due to the problem of the enterprises' ability to bear the strain but is because reform in the realm of prices is confronted with the existing system of property right. In the process of development of the commodity economy in various countries, conditions of price fluctuations and even large-scale price increases have often been seen. For example, during the world's two energy crises in the 1970's, the price of crude oil rose over 1000 percent within a few years and the price increases violently impacted on the enterprises. Under such conditions, how was the problem of bearing the burden solved?

World experiences have shown that principally the assets of the owners of the enterprises bore the burden and that the results of price fluctuations were the closure, bankruptcy, or amalgamation of a number of enterprises. In an economy where a good assets-conversion mechanism exists, assets' standing volume and circulating volume are communicable. Society does not specify that a certain portion of money can only be invested in building plants and at the same time that another portion of the assets can only be fixed on machines and plant buildings. Here, factories can be converted into money and various kinds of negotiable instruments while money and various kinds of negotiable instruments can be converted into factories. In the face of violent price fluctuations, owners of plants which are unable to stand the force of pressure of the price increase of the input materials can sell certain plants to compensate the losses of other enterprises while enterprises which have shown good business conditions and need further development as well as investors can make use of the profits of enterprises and reserve funds for investing in enterprises and buy enterprises on sale at market prices. This is the pattern of owners using assets to bear the burden of price fluctuations and is also the usual pattern under the conditions of a commodity economy. The conditions and results of a large-scale readjustment of the price structure are the renewed fixing of the system of property right.

In the process of price reform in our country, confronting the effects of a price increase, the state asks the operators and producers of enterprises to try to internally offset the pressure. In reality, this can hardly be accomplished because, so far as the enterprises are concerned, to digest or offset the losses due to price increases of the input materials by means of bringing up the efficiency rate and lowering consumption to produce a small amount of additional yield is first, impossible and second, not to their wishes and the result can only be that the "digesting or offsetting" becomes a mere joke. Under the conditions of inflation of general demand, due to the lack of ability to cope, enterprises enjoying fairly good sales conditions have frequently relied on price increases to reduce the pressure on themselves while enterprises who have not done as well will shift the force of pressure to finance.

Through the above analysis, two concepts may be concluded. So far as the rise in commodity prices is concerned, there are two kinds of ability to bear; that is, the income's capacity to bear and the properties' capacity to bear. The former is the capacity to bear from an increased volume of income and the latter is the capacity to bear from the standing volume of assets. In comparing the two, it is found that the latter surpasses the former by several thousand percent and that if the latter is employed to stand the force of the pressure from price reform, then the feasibility will be several hundred percent improved. For example, Shanghai Municipality in 1985 and 1986 had to stand a price increase volume



each year of only 1.3 billion to 1.4 billion yuan. Subtracting the additional income from raising the prices of the municipality's own products, it is estimated that each year the net effect of price reform on the municipality did not exceed 1 billion yuan. But under such conditions Shanghai already felt unable to stand the effects of the price increases and was nearly in a desperate state.

This was mainly because, under the existing system of property right there is no possibility of using readjustment of the structure of the standing volume of assets to counter the effects of price increase and as a result all the effects of a price increase are centralized in the increased amount of receipts for the current year. At the same time the nature of the staff benefits of an enterprise is any unyielding one and price reform must sidestep or go around it to step on the road of repeated price increases and reduction of the financial receipts. Indeed if it were possible, through reform of the structure, to achieve the condition of using the readjustment of the standing volume of assets to bear the strains of price reform, then with Shanghai's scale of assets nearing 100 billion yuan, it would have been extremely easy to stand the effects of a price increase which amounted to only about 1 percent of the total assets and the price reform would not have fallen into the dire state of being unable to go forward or backward simply because of the inability to shoulder the effects.

Transformation of the capacity to bear the effects of price increases is the key to the success of price reform in our country. But this kind of transformation is by no means a narrow financial problem. Its essence is basically to reform the existing property right operation system and the macroeconomic mechanism of the circulation and cycling of funds and is reform of a basic nature of the operation mechanism of the public ownership system. Beginning from now, it is necessary to study deeply this kind of reform so that price reform and reform of property right may be joined together, thus speeding up the process of reform of the economic structure.

### III

#### **Establishing a System of "Simulated Capital" with Publicly-Owned Property Right**

Up to now actual practice in socialist economy has shown the correctness of Lange's suppositions of fixing an equilibrium price and rationally allocating resources through making the enterprises realize average cost as the minimum combination of major factors and making marginal cost equal to product price. In China price reform as well as practices in the whole economic reform have shown the necessity of government simulating the market and also its effectiveness in certain partial operations. However, as a whole, the realization of simulation of the market frequently makes prices tend to equilibrium and renders an enterprise's operations superior or strengthened in stature without having to rely on

the government's price operations and promulgation of business regulations. Realization of simulation of the market must have the precondition of a rational economic structure.

This type of rational economic structure is obviously not an economic structure with power centralized in the government, because in this type of structure although the government's price operations are relatively easy yet even though an equilibrium price has been fixed the planning personnel has no way in each and every enterprise to realize average cost as the minimum combination of the major factors and to achieve the highest production volume.

This type of rational economic structure is not the kind of structure in which the state controls the ownership right of assets while the enterprise exercises the management right. The reason why China's price reform is stagnated in the face of the prices of the means of production of industrial productions, bringing the government's price operations in market simulation to a standstill, is that the enterprises holding and exercising the management right cannot stand the poundings of price fluctuations, thus resulting in repeated price increases as well as financial difficulties. To avoid such conditions, find out the principal body for bearing the risks of price reform, remove the government's difficulties in price operations and form a mechanism restricting the enterprises' carrying out the strengthened allocation of the major factors, it is necessary to carry out reform of the system of property right.

In a socialist economy the direction of reform of the system of property right is not transforming publicly owned assets into privately owned assets but is reform of the operation mechanism of publicly owned assets. Hence, we can, from the special features of the operations of capitalist economy discover the general laws governing the effective allocation, or arrangements, of assets in the commodity economy. So far as a capitalist economy is concerned, aside from the private ownership nature of assets, there are three exceedingly important regulations governing asset operations. The first is the competitive nature in asset operations. In the process of competition, survival of the fittest is manifested in the increase or decrease in assets of different owners. The second is the circulating nature in the form of the assets, that is, various forms of assets can be conveniently transformed, and assets in kind (plants, land and so forth) can be converted into monetary assets (stocks and shares, bonds and even cash); the converse is also true. The third is the owners of assets exercising restriction and supervision over the entrepreneurs and this is the basic condition for the effective operation of assets, and is also the basic condition for ensuring that enterprises realize the combination of the minimum major factors in average cost and the highest production volume. The above three regulations are the necessary conditions for the assets to reach a rational disposition in capitalist economy. In such a society, if there is only the private

ownership system of assets and any one of the asset operation regulations is lacking, then inevitably the efficiency rate in the allocation or disposal of assets will be lowered.

In a socialist economy, under the precondition of maintaining the system of public ownership of assets, how to apply the assets operation regulations the existing in the capitalist economy is a problem that needs to be studied. I believe that socialist economy should not only "simulate the market" but should also "simulate capital" and form a new property ownership system. The main features of such a system are:

First, unified state-owned assets should be converted into multiple publicly owned assets which should include assets belonging to the central authorities, provincial governments, city governments and even county governments.

Second, many organs handling the management and operation of publicly owned assets should be formed, that is, various types of assets management companies (investment companies, fund societies, and so forth) should be formed. The central government and local governments possessing the ownership right of publicly-owned assets, under the precondition of retaining the right of examining the assets' benefits, the right of sharing the benefits and the decision-right concerning the appointment or dismissal of leadership personnel of the assets management organizations, delegate to the assets management organizations the whole of their management right of publicly owned assets, that is, the creditor rights and debtor obligations of all the enterprises under the system of ownership by the state and of the governments at various levels are delegated to the respective assets management organs. These organs enforce wholly commercialized business operations, are solely responsible for their own profits or losses and are all legal entities of an equal status. Among them no subordinate relationship to administrative organs exist. Their basic functions are to realize value increment in assets and basically their operation or business contents are: decisionmaking in investments (including establishing new enterprises, purchasing state and other corporate bonds, stocks and shares and buying and selling enterprises), bearing investment risks by means of the addition or deduction of their assets, participating in the major operations of their subordinate enterprises, policymaking on distribution, employment of managers of subordinate enterprises, and so forth.

Third, formation of assets operation markets of a competitive nature. In these markets, each and every assets management organ and each and every enterprise opens up competition and the mechanism of survival of the fittest is manifested in the constant readjustment of the asset structure and in the assets of some companies continuously shrinking in size due to relatively poor management and in the assets of other companies

becoming larger and larger. In these markets, the joint-stock type of operations may be employed, that is seeking aid from the joint-stock system in running the assets but also the non-joint stock type of operations may be employed, that is, direct investments in establishing enterprises and buying and selling enterprises.

Fourth, earnings from the assets operations should be distributed to the governments at various levels and to each and every assets management organ according to public interest and needs.

If the reform of China's economy can gradually be shifted over to the economic structure of this type of "simulated capital," it will be possible to solve the problem of the lack of principal bodies to bear the risks of price reform and also the risks of various kinds of operations and the interest readjustment brought along by price reform itself will not be centrally formed into a force of pressure on the enterprise's additional earnings or on the interests of the staff members and workers but will be shifted to the owners and manifested in readjustment of the structure of assets and in the increase or decrease in the properties of the assets management companies. By so doing, the mechanism of making the standing volume of assets bear the pressure of price reform will be enabled to perform its role, the force of impediment to price reform will be correspondingly reduced and the possibility of the government manipulating the prices will be increased. Not only that, in the course of economic development, the existence of assets management mechanisms of a competitive nature and of the many assets management companies will effectively control the acts of the manager of the enterprise and enable the enterprise to customarily maintain the feats of the average cost being a minimum combination of the main factors and obtaining the top production volume.

Naturally, establishing a new management mechanism of publicly owned assets or a new property right system cannot replace price reform and how to reform price requires starting from the price structure and the price formation mechanism to conduct scientific research and planning. Partial reforms can also be carried out as opportunity provides. However, the whole analysis above shows that reform of the property right system is the necessary condition for the entire price reform as well as deepening of the reform of the economic structure. The feasibility of such a reform has been amply revealed in the operations of a number of recently formed investment companies of publicly owned assets. Nevertheless, to carry out reform of the whole property right system so that publicly owned assets can effectively stimulate capital in their operations is a much more complex problem. The operational steps in realizing this type of reform should be treated as a specialized problem in research.

## PROVINCIAL

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[Communiqué on 1987 national economic and social development statistics issued by the Shandong Provincial Statistical Bureau—date and place not given]

[Text] In 1987, under the leadership of the Shandong Provincial CPC Committee and the provincial government, the people throughout the province conscientiously implemented the policies of reform and opening up to the outside world, deepened the economic structural reform, and launched in an extensive way the movement to increase production and income and practice economy. As a result, the province made new achievements in economic and social development. Industrial and agricultural production developed constantly and steadily. Both urban and rural markets remained brisk. Foreign trade expanded continuously. Revenues and expenditures were balanced. People's livelihood was improved. New development was made in science, technology, culture, education, public health, and sports undertakings. According to initial estimates, the annual GNP of the province reached 64.2 billion yuan, an increase of 13.2 percent over 1986; the national income reached 56 billion yuan, an increase of 13.1 percent over 1986; and the total industrial and agricultural output value reached 119.18 billion yuan, an increase of 19.4 percent. The province fulfilled the task of making these three targets double the 1980 figures 3 years ahead of schedule, and successfully realized the first step of the province's economic development strategies. The major problems in the development of the national economy were excessive price rises, in particular excessive price hikes of foodstuffs; demand outstripping supply; shortages of some commodities; poor economic results of some enterprises; and lack of agricultural reserve strength.

### 1. Agriculture

In 1987, the rural economic development was vitalized and the commodity rate of farm and sideline products increased thanks to further deepening the rural reform and readjusting the production structure. The province still reaped a bumper grain harvest despite the various kinds of natural disasters. The total agricultural output value reached 29.95 billion yuan, an increase of 8 percent over 1986. Of this, the output value of agriculture increased 9.1 percent, that of fisheries increased 20.4 percent, that of sideline occupation increased 6.6 percent, and that of animal husbandry increased 2.4 percent. Of the major farm products, the output of grain, cotton, oil-bearing crops, and cured tobacco registered increase over 1986.

The output of major agricultural products was as follows:

	1987	Percent Increase over 1986
Grain	33.937 million tons	4.4
Cotton	1.244 million tons	32.3
Oil-bearing crops	2.343 million tons	12.8
Of this, Peanuts	2.298 million tons	12.2
Cured tobacco	199,000 tons	27.9
Silkworm cocoons	13,000 tons	2.6
Fruit	2.432 million tons	22.8

Along with the further implementation of the policies on forestry, in 1987, the province afforested and planted trees on 3.475 million mu. Of this, 2.675 million mu were afforested and newly planted trees occupied an area of 800,000 mu. Of the output of major forest products, walnut increased by 8.1 percent and chestnut increased by 2.1 percent.

In animal husbandry, the number of herbivorous animals increased and that of grain-eating animals was reduced. The number of large animals, sheep, and poultry at year's end increased. However, the number of hogs both slaughtered and at year's end was lower.

The output of major animal by-products and livestock numbers were as follows:

	1987	Percent Increase over 1986
Pork	1.115 million tons	-7.2
Beef and mutton	150,000 tons	39.4
Milk	50,000 tons	24.8
Wool	16,000 tons	31.3
Pigs slaughtered	15.14 million head	-10.0
Large animals at year's end	5.387 million head	12.2
Pigs at year's end	15.47 million head	-7.3
Sheep at year's end	14,041 million head	42.5

Fishery kept up its high development rate. The total output of aquatic products in 1987 reached 1.107 million tons, an increase of 21.0 percent which set a new record. Of this, the total catch of marine products increased 22 percent and that of freshwater products increased 14.0 percent.

Investment in agricultural production increased. The province's expenditures on agriculture in 1987 increased 20 percent and loans on agricultural production increased 32.5 percent. The conditions for agricultural production were improved. The aggregate power used by the province's farm machinery reached 27.36 billion watts, an increase of 7.8 percent over 1986. There were 134,000 large and medium-sized tractors, an increase of 1.5 percent; and 44,000 trucks, an increase of 9.0 percent. The power used by irrigation and drainage equipment was 10.83 billion watts, an increase of 5.9 percent.



A total of 1.961 million tons of chemical fertilizer were applied, an increase of 3.8 percent. Power consumption in rural areas reached 5.79 billion kwh, an increase of 12.7 percent.

At present, our province's agricultural foundation is still weak, its capability to combat natural disasters is fairly poor, and its reserve strength in agriculture remains to be enhanced.

In 1987, the rural economy became more brisk and various industries and trades achieved development in an overall way. The province's total product of the rural society (calculated in term of existing prices) was 87.08 billion yuan, a 26.6 percent increase over the 1986 figure. Of this total product, the total output value of rural industrial, construction, transportation, and commercial enterprises showed a 40.1 percent increase. The proportion of this total output value in the total product of the rural society increased from 47.5 percent in 1986 to 52.6 percent in 1987. The proportion of output value of industrial, construction, transportation, commercial, and food service enterprises surpassed that of the total agricultural output value for the first time.

## 2. Industry

Along with deepening the drive to conduct reform in economic systems, industrial enterprises have further improved their internal mechanism. The vitality of large- and medium-sized enterprises has been markedly enhanced and rural industries have achieved development in both depth and breadth. Of the large- and medium-sized state-run industrial enterprises covered by the budget, about 87 percent have put managerial responsibility system into effect. Some 90 percent of industrial enterprises have implemented the plant director responsibility system. Thus, lateral economic associations have achieved development in both depth and breadth, and the situation in industrial production has become increasingly better.

In 1987, the province's total industrial output value reached 89.23 billion yuan, a 23.8 percent increase over the 1986 figure and an 18.4 percent increase if the 70 billion yuan output value scored by the industrial enterprises at or under the village level is excluded. Of the total industrial output value, the state-run industrial enterprises showed a 14.3 percent increase, collective-run enterprises showed a 24.8 percent increase, and other enterprises showed a 39 percent increase. Rural industries achieved prosperous development and realized more than 30 billion yuan in their annual output value, a 44.6 percent increase over the 1986 figure.

Light and heavy industries basically achieved harmonious development and the development of heavy industry was faster than that of light industry. The 1987 total heavy industrial output value reached 43.16 billion yuan, a 28.7 percent increase over the 1986 figure and that of light industry reached 46.07 billion yuan, a 19.6

percent increase over the 1986 figure. Over the past year, the product structure has been continuously improved and the output of famous trade-mark and fine quality products and of medium- and high-class household electrical appliances has shown a large increase, that of raw materials products and products supporting agriculture has shown a larger increase, and that of products of energy resources has shown somewhat of an increase. However, the product structure readjustment has not kept up with the change in the structure of market consumption. The management of a number of enterprises has been relatively poor, and the supply of energy resources and some raw materials still remains strained.

Of the output of 90 key industrial products covered by the key assessment program, 73 products have shown an increase in output over the 1986 figures.

The output of major industrial products is as follows:

	1987	Percent Increase over 1986
Cotton yarn	422,000 tons	11.8
Cloth	1.63 billion meters	10.8
Woolen fabrics	18.027 million meters	25.4
Machine-made paper and paper board	1 827,000 tons	27.2
Sugar	3,000 tons	-49.2
Cigarettes	2,422 million crates	3.4
Bicycles	2,467 million	17.7
TV sets	466,000	32.6
of which color sets	167,000	80.9
recorders	313,000	-6.8
Cameras	100,000	53.8
Household washing machines	517,300	58.1
Household refriger- ators	91,000	68.5
Coal	53.177 million tons	4.3
Crude oil	31.6 million tons	7.1
Electricity	33.18 billion kwh	10.6
Steel	1.638 million tons	15.8
Rolled steel	1,238 million tons	11.6
Cement	15,588 million tons	15.8
Sulphuric acid	546,000 tons	48.4
Soda ash	327,060 tons	11.6
Chemical fertilizer (100 percent effec- tive composition)	1.23 million tons	23.1
Chemical insecti- cides	14,000 tons	-6.1
Power generating capacity	315,000 kw	6.6
Machine tools	12,000	6.9
Motor vehicles	8,268	-22.1
Large-, medium- sized tractors	8,231	115.3
Small tractors	154,000	32.3

The economic results of industrial enterprises have increased somewhat thanks to deepening the drive to conduct reforms among industrial enterprises and deepening the "Movement" to increase production and practice economy as well as to increase incomes and curtail expenses. In 1987, the province's industrial enterprises which carry out their accounting independently realized 12.52 billion yuan in profits and taxes, a 16.8 percent increase over the 1986 figure. The circulation period of fixed-quota circulating funds showed a 7.2 day decrease over the 1986 figure. Per capita productivity showed a 7.7 percent increase. The quality of industrial products improved somewhat. The rate of steadily improving the quality of major industrial products increased from 71.6 percent in 1986 to 84.4 percent in 1987 and that of fine quality products showed a 12.8 percent increase. Energy consumption per 10,000 yuan output value decreased 2.5 percent over the 1986 figure. The province's 15 products won national silver medals and 857 products won provincial fine quality prizes. Production cost, however, calculated in term of comparable items, showed an increase over the 1986 figure.

### 3. Investment in Fixed Assets and the Building Industry

The province's total investment in fixed assets reached 29.78 billion yuan, an increase of 33.5 percent over the previous year. Of this, 15.56 billion yuan was invested in state-owned units, an increase of 27.6 percent; 7.88 billion yuan was in collective units, an increase of 82.6 percent; and 6.34 billion yuan was invested by individuals, an increase of 9.2 percent.

In 1987, the province as a whole continued to implement the capital construction principle of "three guarantees and three restrictions," strictly controlled the construction of new projects, concentrated efforts on guaranteeing the construction of key projects and their completion, and slowed down the growth rate of capital construction investment. The number of newly initiated capital construction projects of the state-owned units decreased 1.4 percent from the previous year. The total investment in capital construction during the year reached 7.79 billion yuan, a 25.5 percent increase over the previous year, which was lower than last year's growth rate of 27.7 percent. Of this, the investment in local capital construction projects was 2.71 billion yuan, an 18.7 percent increase over the previous year. Of the investment in capital construction, 2.16 billion yuan went to the energy industrial departments, an increase of 24.4 percent over the previous year; 860 million yuan went to the transport, post and telecommunications departments, an increase of 5 percent; and 340 million yuan went to the light and textile industrial department, an increase of 35 percent. The investment orientation became more rational and nonproductive construction projects were curtailed. The proportion of investment in productive construction projects rose from 71 percent in the previous year to 78.9 percent; and the investment in nonproductive construction projects dropped from the previous year's 29 percent to 21.1 percent. Capital

construction investment projects during the year totalled 1,308 and the rate of putting these projects into production was 50.8 percent.

Key construction was further strengthened. In 1987, the province as a whole built 51 large- and medium-sized capital construction projects with a total investment of 5.3 billion yuan, which was 98.3 percent of the yearend adjusted plan. An investment of 3.71 billion yuan was put into 12 large- and medium-sized key projects organized by the state and given reasonable construction schedules, accounting for 98.7 percent of the plan.

Further progress was made in enterprise technological transformation. In 1987, the state-owned units invested 3.77 billion yuan in updating equipment, an increase of 42.5 percent over the previous year. Of this amount, 170 million yuan was invested in enlarging production capacity, an increase of 61 percent; 180 million yuan was invested in raising product quality, an increase of 7.8 percent; and 590 million yuan was invested in increasing the variety of products, an increase of 25.4 percent. A total of 2,044 equipment and transformation projects were completed and put into operation, adding 3.04 billion yuan to fixed assets. A total of 80.7 percent of these projects went into operation, an increase of 5.9 percent over the previous year.

The newly added major production capacities of the fixed assets of state-owned units included: 1.105 million tons of coal; 5.44 million tons of crude oil; 746,000 kilowatts of power generating capacity; 47,000 tons of chemical fertilizer; 47.1 km of newly built railways; 7.5 km of double-track railways; 600,000 tons of coastal port handling capacity; 105,000 places for college and primary and middle school students; and 2,031 hospital beds.

Production and reforms in the building industry achieved new progress. The total output value of the province's 91 state-owned building and installation enterprises and private construction units reached 2.87 billion yuan, an increase of 17.4 percent over the previous year. Per-capita labor productivity rose 18.5 percent over the previous year. Calculated in terms of per-unit projects, the rate of quality projects rose from 37.7 percent in the previous year to 57.4 percent. Of this, the rate of quality projects undertaken by the central construction units reached 65.6 percent and that of the local construction units, 19.7 percent. All kinds of economic contract responsibility systems were applied to 8,358 projects undertaken by state-owned building enterprises (excluding private construction enterprises), which covered a construction area of 5.171 million square meters, accounting for 81.6 percent of the total construction areas. Of this, 2,693 projects, covering a construction area of 1.694 million square meters and accounting for 35.5 percent and 32.8 percent of the total projects and construction area under the contract system, were contracted through bidding. In 1987, the province's scope of



investment in fixed assets was still fairly large, the investment in extra-budgetary construction projects was big, and the construction period was quite long.

#### 4. Transport, Post and Telecommunications

In the new situation, of reform, transport departments fulfilled their annual tasks fairly successfully. The strains in transportation were eased as compared with the previous year, and the transport volumes of the various means of transportation showed increases over the previous year.

	1987	Percent Increase over 1986
Volume of cargo	64.53 billion ton/km	12.0
Railway	49.07 billion ton/km	10.0
Highway	12.23 billion ton/km	18.9
Waterway	3.23 billion ton/km	20.1
Volume of passengers	27.32 billion person/km	10.7
Railway	15.61 billion person/km	12.3
Highway	11.68 billion person/km	8.6
Waterway	30 million person/km	18.0

Railway transport departments improved their efficiency remarkably. The average daily number of carriages moving on the rails was 4,934, a 3.1-percent increase over the previous year; and the average daily productivity of each locomotive was 1.041 million ton/km, a 4.4-percent increase.

Post and telecommunications progressed steadily. Business transactions throughout the province in 1987 totaled 210 million yuan, an increase of 16.8 percent over the previous year. Transactions of various services showed increases over the previous year. Of the total, letters increased by 13.5 percent, newspapers and periodicals 8.3 percent, and long-distance calls 16.2 percent. The number of telephone users in urban areas at year's end amounted to 152,000, 13.4 percent more than the previous year.

However, transport, post and telecommunications were still not able to meet the demands of the development of the national economy, and waste in power and fuel consumption still existed.

#### 5. Domestic Commerce and Commodity Price

The commodity circulation channel of our province was further expanded in 1987, and urban and rural markets became more thriving and flourishing. The annual volume of commodity retail sales totaled 37.47 billion yuan, a 17-percent growth over the previous year. Considering price rises, the actual growth was 8.3 percent. Of the total retail sales, the volume of means of agricultural production was 7.4 billion yuan, an increase of 26.2 percent; that of consumer goods sold to residents was 27.17 billion yuan, an increase of 15.1 percent; and that of consumer goods sold to institutions was 2.9 billion yuan, an increase of 13 percent. Spending by departments and

organizations, and administrative spending were brought under control, thus changing the situation in which the growth of retail sales of consumer goods sold to institutions was larger than that sold to residents, a situation that had lasted for nearly 3 years.

While actively giving play to the role of state commercial units as the major channel in 1987, we actively developed collective and individual commercial units as well as urban and rural trade fairs. The retail sales of the various sectors showed increases. The retail sales in the state-owned sector grew 16.5 percent, those in the collective sector 18.2 percent, and those in the individual sector 14.2 percent. A 21.1 percent rise was registered in the transactions of farm and sideline products between peasants and nonagricultural people.

Among the retail sales volume of all consumer goods, that of food increased 26.5 percent over the previous year. Considering price rises, the actual increase was 12.8 percent. Compared with the previous year, the marketing volume of such major foodstuffs as grain, edible vegetable, oil poultry and fresh eggs rose 7, 16.8, 11.2, and 15.8 percent respectively, and that of pork declined 3.7 percent. The retail sales of clothes grew 11.5 percent over the previous year, those of daily necessities 1.2 percent, and those of such durable consumer goods as televisions, refrigerators and washing machines rose 54.8, 121.4, and 54.6 percent, respectively.

Along with the ceaseless deepening of the commercial structural reform, more than 60 percent of the total commercial, catering, and service trade units subordinate to the state commercial enterprises and supply and marketing cooperatives began to conduct the contract management responsibility system. The state commercial enterprises and supply and marketing cooperatives increased their economic results in 1987. Sales expenses dropped 3 percent from that of 1986. The labor rate of staff and workers increased 11.3 percent. Profits realized by these enterprises and cooperatives in 1987 increased 32.5 percent over 1986.

The urban and rural trade fairs remained brisk. There were 5,737 urban and rural trade fairs at year's end, an increase of 206 over 1986. The transaction volume of the urban and rural trade fairs reached 7.98 billion yuan, an increase of 28.5 percent over 1986. Substantial increases were registered in the volume of vegetables, meat, poultry, eggs, and aquatic products on the market and their business volume.

Market prices rose considerably. The retail price index rose an average 8 percent. The goods price index rose progressively in the latter half of 1987. The retail price index rose 9.4 percent in the urban areas and 7.1 percent in the rural areas. Of the total retail price index, the price of food increased 12.1 percent. Of this, the price of meat, poultry, and eggs rose 24.2 percent, that of fresh vegetables increased 15.9 percent, and that of aquatic products increased 15.3 percent. The cost of clothing increased 2.9

percent. Of this, the cost of woolen goods rose 4.2 percent and that of daily necessities rose 6.4 percent. The cost of medicine and medical apparatus increased 6.8 percent; that of fuel, 5.2 percent; and that of means of production, 5.8 percent.

The cost of living index for urban staff and workers rose 9.2 percent in 1987. The cost of living index for the rural dwellers rose 7.5 percent. The purchasing prices of farm and sideline products rose 8.9 percent over that of 1986.

The major problems in market and goods prices at present are as follows: There is a strain on the supply of some farm and sideline products and expensive electrical appliances for family use. The purchasing power of institutions increased continuously. Goods prices rose substantially. There are some commodities in short supply. Some enterprises and pedlars raise prices in disguise by offering second-rate goods as first-rate, giving customers less goods than they paid for, or marketing fake products.

#### 6. Foreign Economic Relations, Trade, and Tourism

In 1987, the province's trade grew considerably and its foreign economic and technological exchange was further expanded. The total volume of export commodities reached \$2.98 billion, an increase of 39.3 percent which set a record. The total volume of import commodities reached \$507 million, an increase of 24.3 percent. The export commodity structure was further improved, the volume of light and textile products, machines, and electrical appliances to be exported increased notably. There were increasingly more products to be exported to the international market. As a result, the province began to enjoy a higher reputation on the international market.

Along with the acceleration of the pace of opening up to the outside world, the coastal areas of the province are beginning to develop the export-oriented economy and have made new progress in using foreign capital. In 1987, the province signed 151 agreements on using foreign capital with \$305 million involved, showing an increase of 37 percent. In 1987, the province used \$102 million in foreign capital, a drop of 13.3 percent from 1986. Of this, foreign loans reached \$37.22 million, a drop of 2.4 percent; and the investment offered directly by foreign businessmen reached \$23.81 million, an increase of 22.8 percent. In 1987, the province signed 33 agreements on undertaking construction projects outside the province and providing labor services with \$10.27 million involved. The business volume reached \$9.48 million, an increase of 15.6 percent over 1986.

The tourist industry developed rapidly along with economic development and opening to the outside world. In 1987, our province received 108,700 tourists and visitors from more than 30 countries and regions who came to our province on tours and visits and for all kinds of exchanges and activities, an increase of 18.3 percent over

the previous year. The foreign exchange earnings from tourism came to 80.77 million yuan (foreign exchange coupons), an increase of 95.6 percent over the previous year.

#### 7. Science, Technology, Education and Culture

Structural reform of science and technology continued to deepen gradually in 1987, and new strides were made in scientific and technological work, which played an increasingly significant role in economic and social development. During the year, the province as a whole achieved 1,525 major scientific and technological findings—of which 92 items attained the international level, accounting for 6 percent, and 838 items attained the advanced domestic level, accounting for 55 percent. We won 12 state invention awards and 54 awards for technological progress, and achieved gratifying success in implementing the "spark plan." In 1987, the province as a whole arranged 78 state and provincial projects, producing 120 million yuan in output value and 20 million yuan in profits and taxes, and creating 2.34 million yuan in foreign exchange. Many scientific and technical personnel left their laboratories and worked on the forefront of production, displayed an active role, applied the scientific and technological findings to production and construction, and achieved new progress in transforming the productive forces. During the year, the province and various cities (prefectures) popularized and applied 236 scientific and technological findings.

The scientific and technical contingents continued to expand. By the end of 1987, the province's state-owned units in the localities had a total of 724,000 scientific and technical personnel of all kinds, an increase of 77,000 persons over the previous year. Among them, 368,000 persons were technical workers in the natural sciences, an increase of 34,000 persons.

Patent work brought remarkable economic results to society. During the year, the province received 1,286 applications for patent rights and granted 450 patents. A total of 300 or so contracts from patent permits were signed, which added 55 million yuan in additional output value and 13 million yuan in profits and taxes.

The technology market started from scratch and developed rapidly. In 1987, the province as a whole had more than 400 independent technology markets with more than 2,000 workers and fulfilled 2,872 technical contracts involving a transaction volume of 230 million yuan.

The meteorological departments were fairly accurate and prompt in weather forecasting, providing many services and much information for industrial and agricultural production and helping to raise social economic results.

Educational undertakings developed steadily in the course of reform. The year of 1987 witnessed rapid development in the province's higher educational institutes. Ordinary higher educational institutes numbered 50. There were 2,405 postgraduates, an increase of 4.6 percent over the previous year, and 96,000 college students, an increase of 3.8 percent. During the year, a total of 33,000 college and specialized school students were enrolled, an increase of 9.1 percent. The total number of students in the province's higher educational institutes for adults reached some 110,000, an increase of more than 14,000 persons.

The structure of secondary education was readjusted. In 1987, the total number of students in ordinary middle schools, secondary specialized schools, agricultural middle schools, vocational middle schools, and skilled workers schools came to 4.152 million, an increase of 1.1 percent over the previous year. All kinds of secondary vocational technical schools which were equivalent to senior middle schools developed rapidly. The total number of students in these schools reached 346,000 persons, accounting for 40.6 percent of the total number of students in senior middle schools.

Basic education has been further enhanced. The province had 3.289 million students in junior middle schools and 8.449 million students in elementary schools. The enrollment rate of school-age children reached 98.3 percent and 2,001 million children entered the nursery schools, an increase of 157,000 or 8.5 percent over the 1986 figure. The specific education for mentally and physically handicapped people also achieved great development. In 1987, the province had 62 specific educational schools which accommodated 4,277 students.

Cultural, journalistic, publications, and radio and television broadcasting undertakings prospered. The province had 12,388 film projecting units of various kinds and issued 319 new films. It had 139 artistic troupes, 150 artistic and cultural centers, 2,359 cultural stations, 105 public libraries which have 13.52 million books, 36 museums, 40 radio stations, 24 radio transmission relay stations, and 23 television stations. The coverage rate of radio broadcasts reached 85 percent and that of television broadcasts reached 75 percent. The province manufactured 129 television series dramas and 49 radio broadcast dramas. It published 888.4 million copies of 70 kinds of newspapers, 55,087 million volumes of various periodicals, and 387 million books.

#### **8. Public Health, Environment, and Physical Culture and Sports**

Medical and health undertakings have achieved steady development. The province has basically established medical and health networks in both urban and rural areas. By the end of 1987, the province had 2,290 hospitals and 147,000 patient beds, a 5.4 percent increase over the 1986 figure. It had 220,000 specialized public health personnel, a 3.5 percent increase over the

1986 figure. Of these public health personnel, 87,000 are doctors (including 50,000 Chinese traditional and western doctors), a 4.8 percent increase over the 1986 figure. The province had 44,000 medical technicians and nurses, a 5.1 percent increase over the 1986 figure. The broad masses of public health personnel did a great deal of work in preventing and controlling diseases, and the rate of incidence of common infectious and chronic diseases showed a marked decrease over the 1986 figure. Thus, the standard of people's health has been upgraded. However, the shortage of doctors in rural areas is still serious.

Regarding environmental protection, the work of bringing pollution under control and conducting environmental management has achieved new development. The newly increased capability for sewage disposal reached 40 million tons. The rate of preventing smoke pollution reached 74 percent, a 16.2 percent increase over the 1986 figure. The specific value of the noise on main communications lines in urban areas declined by 2 or 3 decibels.

The province scored new achievements in physical culture and sports and the mass activities of sports have become more extensive. In 1987, 3 athletes broke 4 Asian records on 8 occasions and 11 athletes broke 11 national records on 18 occasions. The province's athletes won 67 golden medals in both international and domestic games, 41 silver medals, and 42 bronze medals. Of these achievements, they won 49 golden medals in domestic games and the province won 5th place in the 6th national games. Mass sports activities were carried out extensively in which the province held 6,157 athletic meetings at or above the township-town level with 1,377 million sportsmen participating. There are 4.313 million sportsmen throughout the province who have reached the "standard" set forth by the state for sports training.

#### **9. Living Standards of the People**

Based on the development of industrial and agricultural production, people's incomes in both the cities and countryside increased, and people's living standards continued to improve. In 1987, the province's gross payroll totaled 9.13 billion yuan, an increase of 1.16 billion yuan or 14.6 percent over 1986. A sample survey of urban employees' families showed an average annual per-capita income of 901.3 yuan, an increase of 16.0 percent over 1986. If price rises are taken into account, real per-capita income rose 6.2 percent. A sample survey of farmers' families showed an average annual per-capita net income of 517.69 yuan, a 15.2 percent over 1986. If price rises are taken into account, real income rose 9.0 percent. However, the income rise for urban and rural residents of different status was not balanced, and the real income of 21 percent of urban families dropped because of price rises. In the countryside, the average annual per-capita net income of 3.3 percent of farmer families was below 200 yuan.



Employment continued to increase. In 1987, 266,000 people found jobs in urban areas. By the end of 1987, the province had 6.846 million employees, 350,000 more than at the end of 1986. Of them, contract workers numbered 603,000, up 202,000 over 1986. Self-employed workers in the cities and towns totaled 159,000, 43,000 more than in 1986.

Savings deposits increased greatly in urban and rural areas. By the end of 1987, individuals' bank savings amounted to 24.24 billion yuan, an increase of 6.68 billion yuan or 38 percent over 1986 yearend figure. Housing for both urban and rural dwellers improved further. In urban areas 11.18 million square meters of housing floor space were built, and 74.18 million in the countryside.

Social welfare services continued to improve. In 1987, the province had 4,344 social welfare establishments providing for 43,000 people. Urban and rural collectives provided for 154,400 elderly, disabled, or orphans. State relief and support were given to 346,000 families which were suffering great hardships. Great progress was made in developing social welfare enterprises. By the end of 1987, the province had established 3,011 welfare plants, providing jobs for 42,000 disabled people.

## 10. Population

According to a sample survey of 40 counties and cities (districts), the birth rate in 1987 was 23.35 per thousand, and the mortality rate was 7.07 per thousand, yielding a natural growth rate of 16.28 per thousand. The sample survey indicated that by the end of 1987, the province had 79.577 million people, 1.397 million more than the 1986 yearend figure.

Note: 1. The gross national product and national income listed in this communique are calculated in terms of 1980 constant prices. If calculated in terms of 1987 prices, the gross national product was 77.55 billion yuan, and national income was 67.4 billion yuan.

2. Gross national income refers to the increased value of both the material productive and non-productive sectors, not including the value of products and labor service consumed by intermediate units.

3. The gross product of the rural society includes the total output value of agriculture and of collectively and privately owned rural industries, construction, transport, and commerce.

4. The gross product does not include the meat subsidies to workers and staff members.

5. The total volume of imported commodities does not include the commodities imported by the China National Import and Export Corporation and other provinces on a commission basis.

## Shanxi 1987 Economic, Social Statistics

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["Communique on Shanxi's 1987 Economic and Social Development Statistics Issued by the Provincial Statistical Bureau on 26 February 1988"]

[Text] In 1987, under the leadership of the provincial party committee and government and with the purpose of deepening reform, increasing vitality, improving supply, controlling demand, raising efficiency, and stabilizing the economy, the people in Shanxi steadily accelerated the pace of reform and extensively carried out the drive to "increase production and practice economy, and increase income and retrench expenditure." As a result, production developed steadily, new achievements were made in the construction of energy, heavy industry, and chemical bases; the markets were brisk, foreign economy further expanded, income of urban and rural inhabitants increased, and new progress was made in science, technology, culture, education, public health, and other social undertakings. According to initial estimates, Shanxi's gross domestic product for 1987 was 23.2 billion yuan or 6.5 percent more than in 1986. The total product of society amounted to 46.28 billion yuan, a 6.8 percent increase over the previous year. National income totaled 18.9 billion yuan, up 4.2 percent. The major problem in economy was demand outstripping supply.

## I

## Agriculture

Over the past year Shanxi Province further attached importance to and strengthened agricultural production and adopted various measures to increase the staying power of agriculture. Investment by the peasants in production and by the state in agriculture increased, farmland capital construction reached a high tide, new agrotechniques were spread rapidly, and the supply of capital goods for farming increased somewhat. The total agricultural output value in 1987 reached 4.91 billion yuan, 2.8 percent down from the previous year. Of this, the proportion of forestry, animal husbandry, sideline occupation, and fishery rose from 27.8 percent in 1986 to 28.1 percent in 1987.

The structure of crop cultivation was further readjusted. The sown area of grain increased by 1.3 million mu over 1986, the proportion increasing from 79.6 percent in 1986 to 81 percent in 1987. Hit by serious drought, output of summer grain was only 2.396 billion kg, a drop of 23 percent or 718 million kg less than the previous year. In view of the drop in grain output, the provincial party committee and government promptly urged the people to pay close attention to autumn grain production and issued the call to make up for the summer grain loss with autumn grain. Although the province was again hit by drought during the hot summer days, a good harvest was reaped in autumn grain and the output reached

4.729 billion kg, a 12.3 percent increase or 519 million kg more than the previous year. The total output of grain in 1987 was 7.125 billion kg, down 199 million kg from the previous year because the decrease in summer grain outstripped the increase in autumn grain. The province put an end to the situation of cotton production having dropped for 2 successive years. Cotton output increased by 13.48 million kg over 1986, the per mu yield exceeding 50 kg for the first time. Vegetable output reached an all-time high. Owing to the decrease in sown area, the output of oil-bearing crops and beet dropped somewhat.

The output of major agricultural products was:

	1987	Percentage difference from 1986
Grain	7.125 billion kg	-2.7
of which:	2.396 billion kg	-23.0
summer grain		
autumn grain	4.729 billion kg	12.3
Cotton	77.85 million kg	21.0
Oil-bearing crops	308.12 million kg	-12.4
of which: rapeseed	14.86 million kg	-32.8
Jute, ambary hemp	2.48 million kg	-35.0
Cured tobacco	1.53 million kg	18.6
Beetroot	192.87 million kg	-29.1
Vegetables	2.946 billion kg	4.1
Fruit	450.00 million kg	4.1

In forestry, the province vigorously implemented the "Forest Law," consolidated and perfect various forms of the production responsibility system, continuously upheld the method of "focusing on key points, giving support to the best, making investment according to projects, exercising management according to projects, preparing designs according to the plan, carrying out construction according to the designs, and checking and accepting the completed projects according to construction," and further aroused the enthusiasm of the broad masses for planting trees, and exercising management over and protecting the forests. As a result, the afforestation area expanded and quality improved somewhat. The province afforested an area of 2.002 million mu (the survival rate reached 85 percent) and planted 250 million trees, overfulfilling the annual quotas.

In animal husbandry, the output of milk, wool, poultry, and eggs increased; the number of large animals went up; and the number of sheep in stock rose. However, the number of pigs in stock fell by a big margin.

The output of major animal by-products and livestock numbers were as follows:

	1987	Percentage Change from 1986
Pork	168.686 million kg	-6.2
Beef and mutton	37.499 million kg	33.3
Milk	125.57 million kg	18.9
Wool	3.689 million kg	19.0
Pigs slaughtered	2.527 million head	-7.1

	1987	Percentage Change from 1986
Pork	168.686 million kg	-6.2
Beef and mutton	37.499 million kg	33.3
Large animals at year's end	2.717 million head	0.6
Pigs at year's end	2.913 million head	-20.5
Sheep at year's end	5.101 million head	15.5

Fishery maintained a high development rate. The output of aquatic products exceeded 5 million kg, reaching 5.428 million kg, a 35.6 percent increase over 1986.

Conditions for agricultural production improved somewhat over the year. By the end of 1987, the aggregate power used by the province's farm machinery reached 8.95 billion watts, a 5 percent increase over 1986. There were 33,000 large and medium-sized tractors and 35,000 trucks. The power used by irrigation and drainage equipment was 1.43 billion watts. A total of 407,000 tons of chemical fertilizers were applied throughout the year, an increase of 0.2 percent over 1986. The total consumption of electricity in rural areas was 2.04 billion kilowatt-hours, up 15.6 percent. As the foundation of agriculture remained weak, there was a shortage of capital goods for farm purposes such as chemical fertilizers and diesel. This was an essential factor affecting the steady growth of agriculture.

With the deepening of rural reform, various trades developed vigorously and changes were effected in the economic structure. The total social output value in rural areas in 1987 was 16.37 billion yuan, 5.8 percent more than the previous year. Of that sum, the total output value of rural industries, building trade, transportation, and commerce went up by 10.3 percent, bringing its proportion in the total rural output value up from 61.5 percent in 1986 to 82.5 percent. But the proportion of the total agricultural output value dropped from 38.5 percent in 1986 to 37.5 percent.

## II

### Industry

With the continuous improvement of the structure and better economic results achieved, a balanced development of industrial production was witnessed in 1987. The total industrial output value for the year reached 27.78 billion yuan, up 11.5 percent. If the output value of village-run industries was excluded, the figure was 22.65 billion yuan, an increase of 10.4 percent over the previous year, overfulfilling the annual quotas by 3.2 percent. Of the total sum, the output value of the 778: 3:594 23,5 70 9.2 percent, the collective sector by 13.3 percent, the urban and rural cooperatives by 6.2 percent, and the private sector by 41.5 percent.



Light and heavy industries developed in proportion. The 1987 total output value of light industry was 7.89 billion yuan, 12.3 percent more than in 1986, while that of heavy industry reached 19.89 billion yuan, up 11.2 percent. The ratio of light and heavy industries was 28.4 : 71.6. The development of power industry, chemical industry, and the rising electronics industry was noticeably accelerated, while basic industries, such as coal, metallurgy, machine-building, and building materials expanded steadily. In the consumer industry, textiles, light industry, and pharmaceuticals developed rapidly.

The output of 62 of the 90 major industrial products, or 68.9 percent, met or topped provincial plans. They included cotton yarn, cloth, coal, steel, pig iron, electricity, and cement. The output of 64 major industrial products, or 71.1 percent, exceeded the provincial plans.

The output of major heavy industrial products was as follows:

	1987	Percentage Change from 1986
Coal	231.49 million tons	4.4
Electricity	26.3 billion kwh	19.7
Pig iron	3.3 million tons	9.6
Steel	2.04 million tons	7.1
Rolled steel	1.2 million tons	3.4
Cement	5.42 million tons	4.2
Plate glass	668,000 standard cases	-15.5
Sulphuric acid	321,000 tons	64.1
Caustic soda	30,000 tons	32.5
Chemical fertilizers	556,000 tons	35.1
Chemical insecticides	1,811 tons	-15.6
Machine tools	1,400	-2.9
Walking tractors	14,729	39.5
Transformers	3,780,000 kva	106.1
Mining equipment	19,109 tons	-4.1

The output of major light industrial products was as follows:

Cotton yarn	103,752 tons	12.4
Cloth	480,980,000 meters	7.5
Woolen fabrics	2,590,000 meters	-5.0
Silk fabrics	11,260,000 meters	10.9
Woolen blankets	397,000	8.7
Machine-made paper, paperboard	246,000 tons	20.5
Sugar	31,497 tons	-6.7
Beer	102,195 tons	14.4
Cigarettes	164,000 cases	-13.3
Bicycles	342,000	87.6
Wrist watches	1,423,000	-59.4
Television sets	141,100	28.8
of which: color sets	29,300	87.1
Tape recorders	13,795	-60.0
Household washing machines	332,000	45.1
Electric fans	12,554	16.2
Household furniture	2,784,000 pieces	3.7

Industrial production combined well with marketing which turned out better economic results. Profits and taxes of state-owned industrial enterprises totaled 1.69 billion yuan, a 14.8 percent increase over 1986. Income from sales amounted to 10.54 billion yuan, up 17 percent. Per capita productivity increased by 7 percent. The number of losing enterprises decreased, their deficits dropped, and they achieved remarkable successes in turning deficits into profits. Owing to poor management of a number of enterprises and their lack of adaptability and failure to assimilate new technology and advanced management and also due to adverse external influence, some quotas were not fulfilled. Compared with 1986, the amount of capital used for finished products and the costs of comparable products increased at the end of the year.

Industrial reforms further developed. While readjusting external relations, the reforms within enterprises were also in full swing. By the end of the year, 89.6 percent of the state-owned industrial enterprises had introduced the director responsibility system, 85.2 percent of the large and medium-sized state-owned industrial enterprises had instituted various forms of the contract management responsibility system, and 10.5 percent of the small state-owned industrial enterprises were either given over to collective management or leased or contracted to individuals. Horizontal economic associations developed in depth and breadth. By the end of 1987, the number of horizontally associated organizations made up chiefly of industrial enterprises above county level had reached 66, involving investments of 87.408 million yuan. A total of 178 enterprises joined these organizations and their production and efficiency outstripped the average level of the province's industry.

### III

#### Energy

Headway was made in the province's energy production and building in 1987 and the role of energy base was brought into full play. Investment in capital construction of energy projects totaled 2.19 billion yuan. Of this sum, 1.43 billion yuan went to the coal industry, adding a production capacity of 9.4 million tons, and 680 million yuan was channeled to the power industry, increasing the installed capacity by 456,000 kw. Regarding the transmission projects closely related to the power projects, a 451.5 km transmission line of above 110 kv was completed with a transmission capacity of 547,000 kva. Of the state's key construction projects in Shanxi, the No. 4 generating unit of Shentou power plant in the Antaibao mining area of the China Pingshuo Opencut Coal Mine and the No. 5 generating unit of the Tadong power plant were put into operation.

The output value of the energy industry reached 6.614 billion yuan, 430 million yuan or 6.9 percent more than in 1986. A total of 197 million tons of primary energy

sources (in terms of standard coal) were produced, up 4.3 percent; and 25.27 million tons of secondary energy sources were produced, up 21.8 percent.

During the year Shanxi allocated 154.18 million tons of coal to 25 provinces, municipalities, and autonomous regions. If we include the amount exported, the figure would be 161.11 million tons, 8.73 million tons or 5.7 percent more than in 1986, the proportion in total coal production increasing from 68.7 percent in 1986 to 69.6 percent. The figure accounts for 78 percent of the coal allocated by other parts of the country. In 1987 Shanxi supplied 5.434 billion kilowatt-hours of electricity to Beijing, Tianjin, and Tangshan, 1.802 billion kilowatt-hours or 49.7 percent more than in 1986. By allocating energy to other parts of the country, Shanxi made new contributions to easing the nationwide shortage.

The volume of coal exports further increased. In the year Shanxi exported a total of 6.73 million tons of coal, 1.95 million tons or 40.8 percent more than in 1986. Foreign exchange earned through coal exports amounted to \$202 million, accounting for 58.4 percent of the province's total export commodities.

#### IV

##### Investment in Fixed Assets and Building Trade

Investment in fixed assets was brought under control. In 1987 the province's investment in fixed assets totaled 10.7 billion yuan, 1 billion yuan or 10 percent more than the previous year. Of the total, 8 billion yuan went to state-owned enterprises, up 9.5 percent; 1 billion yuan to collective enterprises, down 2.6 percent; and 1.7 billion yuan was invested by individuals, up 21 percent. In state-owned units, investment in capital construction went to 5.13 billion yuan, down 3.2 percent. Of this sum, the central authorities made an investment of 3.47 billion yuan, down 10.3 percent, while the localities invested 1.66 billion yuan, up 16 percent. Of the investment made by the localities, 1.17 billion yuan reached the state target and was basically within the requirements of the state.

The investment setup further improved. Of the investment in capital construction, investment in productive projects totaled 3.89 billion yuan, down 0.3 percent, its proportion increasing from 73.8 percent in 1986 to 75.9 percent. Investment in nonproductive projects was 1.24 billion yuan, down 11.3 percent, its proportion dropping from 26.2 percent in 1986 to 24.1 percent. Of this sum, investment in housing totaled 470 million yuan, down 15.5 percent, a proportionate drop from 10.5 percent in 1986 to 9.2 percent.

A total of 44 large and medium-sized projects were under construction, involving an investment of 3.12 billion yuan and accounting for 60.7 percent of the total investment in capital construction, fulfilling 96.6 percent of

the annual investment plan. The progress was within the limits prescribed by the state plan. Key construction projects in communications and transportation developed rapidly. By the end of 1987, the province completed the construction of 9 highways extending to other provinces, with a total length of 421.5 km. In the year, 3 highways with a total length of 214 km were under construction. Of the total of 519 km of the Shenhe, Xiaoliu, Xingbu, Wumo, and Erqin railways under construction, 65.8 km were completed and opened to traffic. The building of these railways and highways played an important role in Shanxi's economy and in putting an end to the backwardness of the poverty-stricken areas. Of the 2,261 projects under construction in Shanxi last year, 950 were completed and put into operation. The investment rate of construction projects was 42 percent.

Newly added production capacities in capital construction projects (except coal and power) include: 150,000 tons of steel, 50,000 tons of coke, 10,000 spindles, 40 million meters of printed and dyed textiles, 9,000 tons of sugar, 4,500 tons of liquor, 1,260 tons of milk powder, 18,400 tons of sulphuric acid, 100 freight cars, 74.7 km of new railway track, 109.8 km of double-track railways, 544.7 km of microwave telephone line, 8,900 urban telephone switchboards, 22 long-distance telephone switchboards, 155,000 mu of effective irrigation, 66,000 places for students of different kinds of schools, daily supply of 8,000 tons of tap water, and daily supply of 456,000 cubic meters of gas in urban areas.

Technological transformation of enterprises advanced steadily. State-owned units invested 2.09 billion yuan in updating equipment, 340 million yuan or 19.2 percent more than in 1986, the proportion in investment in fixed assets by state-owned units rose from 24 percent in 1986 to 26.2 percent, the highest level since 1980. Of this amount, 719 million yuan was invested in enlarging production capacity, up 30.3 percent; 178 million yuan in increasing the variety of products, down 23.1 percent; 105 million yuan in improving product quality, up 34.9 percent; and 75 million yuan in reducing energy consumption, up 160.3 percent. Of the 1,906 projects undergoing re-equipment and transformation in the year, 1,031 were completed and put into operation, adding 1.56 billion yuan to fixed assets.

Reforms in the building industry deepened. Of the large and medium-sized projects under construction, 86.4 percent introduced various forms of the investment contract responsibility system. The economic contract responsibility system was applied to 9,406 projects undertaken by state-owned construction enterprises, which covered a construction area of 6.34 million square meters, accounting for 75.5 percent of the province's total. Of these, 2,180 projects, covering a construction area of 860,000 square meters and accounting for 10.2 percent of the total were contracted through bidding. In 1987 the total output value of state-owned building

industry reached 2.95 billion yuan, an increase of 8.4 percent over the previous year and the per capita productivity rose 11.5 percent. Headway was also made in the employment system.

Geological surveys made marked progress. A total of 13 mineral bases were discovered, the reserves of 6 being equivalent to large and medium-sized mines. Reserves of 15 kinds of minerals including coal, ore, copper, aluminum, quartz, and indite were verified. Geological work further developed and entered a new sphere. A total of 78,000 meters of tunneling was completed in 1987.

V

Transport, Posts and Telecommunications

In 1987 the volume of goods handled by various transportation means totaled 363.42 million tons, an increase of 7.9 percent over the previous year. Of this total, railways handled 189.11 million tons, up 5.9 percent and trucks handled 174.31 million tons, up 10.3 percent.

Transport services in 1987 were as follows:

		Percentage Change from 1986
Cargo	44.71 billion ton/km	10.0
of which: Rail	37.37 billion ton/km	9.1
Road	7.34 billion ton/km	14.7
Air	0.004 billion ton/km	11.5
Passengers	11.33 billion person/km	9.7
of which: Rail	6.84 billion person/km	4.1
Road	4.48 billion person/km	19.1
Air	0.01 billion person/km	3.1

Labor efficiency further increased. The average daily number of wagons loaded by the Taiyuan, Datong, and Linfen railway subbureaus increased by 3 percent, 4.2 percent, and 3.6 percent, respectively, over 1986. Loading capacity increased by 3.1 tons, 1.6 tons, and 1.9 tons, respectively. Labor productivity of railway workers rose 9.4 percent, 3.1 percent, and 0.6 percent, respectively. By the end of 1987, the Linfen railway subbureau operated safely for 7 successive years, avoiding major accidents for 2,557 days, ranking first among the country's 58 railway subbureaus. The Taiyuan railway subbureau also operated safely for 5 successive years. The number of passenger train carriages increased to meet the needs of large numbers of passengers. At the same time the railway service system was reformed, increasing the passenger transport capacity. Highway transport made marked progress, thus lightening the burden of railways. By the end of the year, 99.2 percent of the counties were connected with asphalt road, 95.8 percent of the townships had roads, and 93 percent of the villages had roads and paths for tractors.

Posts and telecommunications further developed. Business transacted by these departments totaled 81.09 million yuan, a 14.1 percent increase over 1986. The number of letters handled went up 1.5 percent, telegrams

increased 13.9 percent, and long-distance telephone calls were up 11.6 percent. There were 72,000 telephone subscribers in urban areas at year-end, an increase of 13.8 percent. The backwardness of basic telephone facilities changed somewhat. The 10,000-program controlled switchboards project imported by Taiyuan was put into operation. Other criss-cross switchboard projects were at the installation and testing stage. The Taiyuan-Datong 300-circuit coaxial cable project and the Taiyuan-Xian 1,800-circuit microwave transformation project were basically completed. However, transport and posts and telecommunication fell short of the needs of economic development.

VI

Domestic Commerce, Supply and Marketing of Materials

The retail market remained brisk in 1987. The value of retail sales totaled 12.84 billion yuan, a 14.6 percent increase from 1986. The real increase was 6.6 percent after deducting the factor of price hikes. Of the total retail sales, the value of consumer goods was 11.36 billion yuan, up 14.4 percent of which sales to inhabitants rose 15.2 percent and to social groups rose 9.3 percent. The value of capital sales for farm purposes was 1.49 billion yuan, up 15.5 percent. The retail sales of all commodities has increased since 1986. Retail sales in the public sector grew by 12.9 percent; in the collective sector, by 11.1 percent; and in the individual sector, by 29.6 percent; and a 19.1 percent rise was registered in transactions between peasants and non-agricultural inhabitants.

Retail sales of all consumer goods increased. Apart from pork, eggs, sugar, and some other foods which were in somewhat short supply, there was sufficient food—in fact 15.6 percent more than in 1986 (a real increase of 4.8 percent after deducting the factor of price hikes). Clothing supplies increased by 10.1 percent and other necessities, 15.2 percent. Sales of high-class, new, famous-brand household electric appliances increased quite a lot.

The state-owned commercial enterprises and supply and marketing cooperatives continued to play an important role as the main market channel. In 1987 the total value of commodities purchased by state-owned and joint state-private commercial enterprises was 8.06 billion yuan, a 25.6 percent increase over the previous year. Of this, purchase of manufactured goods rose 28.9 percent and that of farm and sideline products went up 17.7 percent. The total value of commodities allocated by state-owned and joint state-private commercial enterprises from the commercial departments of other provinces reached 3.94 billion yuan, up 13.7 percent from 1986. On the basis of the increasing sources of goods, the volume of sales totaled 10.89 billion yuan, a 13.5 percent increase over 1986.



The reform of the commercial system developed in depth and breadth. By the end of 1987, over 60 percent of the large and medium state-owned commercial enterprises had implemented the contract management responsibility system; and 91.6 percent of the small state-owned commercial enterprises had been handed over to collectives and collective ownership, or leased to individuals. Some 79.3 percent of the supply and marketing cooperatives carried out various forms of the responsibility system. The number of urban and rural fairs increased from 1,402 in 1986 to 1,503 in 1987. Their business volume in 1987 amounted to 2.04 billion yuan, a 17.2 percent rise over the preceding year. Commercial, catering, and service associations increased rapidly, numbering 67 by the end of the year, 9 more than in 1986. A total of 130 commercial enterprises joined the associations. They achieved better economic results, making a profit of 1.72 million yuan on their 1987 turnover of 54.55 million yuan.

There was an improvement in the economic results of state-owned commerce and of supply and marketing cooperatives. Expenses for every 100-yuan worth of sales dropped 1 percent in 1987, gross profits from sales of commodities grew 12.1 percent, profits from operation went up 350 percent, turnover of working funds was 1.3 days less than in 1986, and the losing enterprises made up their deficits by 12.5 percent.

With the further deepening of economic structural reform, the scope of market regulation of capital goods continued to expand, entailing a drop in the proportion of materials distributed according to state plan. The market for capital goods was brisk in 1987. The proportion of rolled steel distributed under the state plan dropped to 36 percent from 46.4 percent in 1986; of cement, to 28.2 percent from 32.2 percent; and of timber, to 67.2 percent from 68.6 percent. Sales of materials departments totaled 2.708 billion yuan, a growth of 15 percent. Of this, sales of the capital goods departments totaled 195 million yuan, an increase of 59.1 percent.

Prices rose considerably. The retail price index rose an average of 7.5 percent, exceeding the 5 percent growth prescribed in the plan in early 1987. The price index rose 8.9 percent in urban areas and 6.5 percent in rural areas. The price of foodstuffs went up 10 percent, of which the price of meat, poultry, and eggs rose 20.5 percent; of fresh vegetables, 20.1 percent; of fruit 25.2 percent; and of preserved fruit, 18.3 percent. The cost of clothes increased by 5.5 percent (knitting wool rose 24.3 percent and woolen fabrics, 8.7 percent); household goods, 6.9 percent; and medicine and medical apparatus, 7.2 percent.

The cost of living index for employees went up 8.5 percent in 1987, of which service charges rose 4.9 percent.

## VII

### Foreign Trade and Tourism

Further headway was made in foreign trade. The total volume of Shanxi's imports and exports in 1987 totaled \$410 million, an increase of 10.8 percent over the previous year. Of this, exports totaled \$346 million, up 14.3 percent, overfulfilling the quotas by 10.4 percent; imports totaled \$63.9 million, a drop of 2.1 percent from 1986. There were 392 kinds of export commodities, and export volume of 31 kinds of these exceeded \$1 million and foreign exchange earned accounted for 86.6 percent [as published]. The number of countries and regions involved in Shanxi's foreign trade increased from 59 in 1986 to 79 in 1987. At Shanxi's first import and export trade fair, a total of 300,000 foreign businessmen and visitors were received. Transactions in foreign trade totaled \$73.53 million, and in domestic trade 145 million yuan.

Progress was made in using foreign capital. In 1987 Shanxi absorbed \$10.9 million in foreign capital, 110 percent more than in 1986. This included \$6 million in loans and \$4.9 million in direct foreign investment and commercial credit. At the Third Foreign Economic and Technological Cooperation Trade Talks, Shanxi signed contracts with foreign businessmen on 32 projects, involving \$42.41 million.

Further advances were made in economic and technological cooperation with foreign countries. Shanxi signed 2 contracts for overseas projects and labor service in 1987 worth \$3.45 million. Contracts fulfilled were worth \$4.39 million, a 160 percent increase from 1986.

The tourism industry developed and in 1987 Shanxi's tourism departments received 33,000 tourists and visitors from 20 countries and regions, 30 percent more than in 1986. Foreign exchange earned through tourism during the year amounted to 9.63 million yuan, up 30 percent over 1986.

## VIII

### Science, Education, and Culture

Scientific and technological undertakings developed vigorously. In 1987 a total of 157 inventions won state and provincial scientific and technological progress awards, 13 of which were state scientific and technological progress awards. The "spark program," which is meant to boost rural economy, made good progress in 344 projects during the year. Of these, 33 were state-level projects and 311 were projects at above county level, involving an investment of 84.37 million yuan. Twenty-eight percent of projects were completed or partly completed. The reform of the scientific and technological system promoted the application of scientific and technological results. Scientific and technological activities among the masses were extensive.

Marked progress was made in patent work. This year the provincial patent office received 315 applications for patent rights, up 47.2 percent, and granted 83 patents, up 118.4 percent.

Meteorological departments made fairly prompt and accurate weather forecasts, providing a great deal of socially and economically helpful data.

To boost economic construction and access to resources, the cartographical departments drew up 1,357 maps. A total of 493,000 copies of the maps was printed.

Education developed to some degree in the course of reform. Institutions of higher learning enrolled 301 postgraduates in 1987. There were 983 postgraduates studying, 161 of whom received postgraduate degrees. Universities and colleges enrolled 15,000 students last year and the total student body was 49,000, an increase of 3,000 over 1986. Last year 12,000 students of higher education graduated. Institutions of adult higher education registered 10,000 new students in 1987, and thus had a total enrollment of 37,000. A total of 12,000 students graduated from these institutions last year.

The structure of secondary education continued to be rationalized. The technical secondary schools had an enrollment of 67,000 students, 6,000 more than in 1986. The agricultural and vocational schools had a student body of 80,000. Senior middle schools had 232,000 students, 2,000 less than in 1986, while junior middle schools had 1.406 million students, 15,000 more than the previous year. There were 82,000 studying at adult vocational schools and 186,000 at adult technical schools.

There were 3,054 million pupils in primary schools. The attendance rate of school-aged children reached 99.2 percent. There were 6,850 kindergartens taking care of 729,000 children, 76,000 more than in 1986.

The province's culture flourished. In 1987 Shanxi produced and dubbed 1 feature film, 4 television series (25 parts), and 13 radio plays (17 parts); and released 182 new full-length films. Shanxi's writers and artists paid close attention to the quality of their work. As a result, some television series and dramas, such as "Sons and Daughters of Huanghe," scored a success and evoked strong repercussions nationwide. The province had 6,168 cinemas and film projection teams, 172 performing art troupes, 117 cultural centers, 106 public libraries, 59 museums, and 142 archives.

In addition, there were also 9 broadcasting stations, 18 radio transmitting and relay stations, 20 television stations, and 26 television transmitting and relay stations each with a capacity of more than 1,000 watts. Some 580 million copies of provincial and prefectural newspapers, 70 million copies of magazines, and 110 million copies of books were published last year.

## IX

### Public Health and Sports

Shanxi had a total of 91,000 hospital beds at the end of 1987, a 6 percent increase over the previous year-end figure. There were 119,000 professional health workers, up 4 percent from 1986. This total included 51,000 doctors (26,000 of whom were doctors or technicians practicing traditional Chinese medicine), a 2.4 percent increase; and 18,000 were nurses, up 4.2 percent. Successes were achieved in preventing and controlling various infectious, chronic, and epidemic diseases in the remote mountain areas. However, the rural areas had a shortage of doctors and medicines.

In 1987 Shanxi's athletes won 37 gold, 36 silver, and 29 bronze medals in national games and four athletes broke 5 national records on six occasions. Shanxi's athletes won 6 gold, 5 silver, and 6 bronze medals at the Sixth National Games. However, the results were not as good as those of previous national games. The province held games at above county level on 1,626 occasions, with 514,000 athletes participating. Mass sports activities were extensively carried out.

## X

### Living Standards

People's incomes in both the cities and the countryside continued to increase and their living standards improved. A sample survey of 1,060 urban households in 12 cities and counties showed an average annual per capita income for living expenses of 726.6 yuan, 69.3 yuan or 10.5 percent more than in 1986. If price rises are taken into account real per capita income rose 1.9 percent. The real income of some urban inhabitants dropped somewhat because of price hikes.

A sample survey of 2,100 peasants households in 35 counties showed an average annual per capita net income of 376.9 yuan, a 9.2 percent increase or 31.9 yuan more than in 1986. Income increased 3.8 percent in real terms. The total net income included 327.7 yuan from productive activities, a 7.7 percent increase; and 49.2 yuan from nonproductive activities, up 20.7 percent. In the countryside, the average annual per capita net income of 16.1 percent of peasant families was below 200 yuan.

The reform of the labor system deepened, employment increased, and the workers' wages steadily increased. In 1987 jobs were given to 97,100 people. The province had 4,095 million employees by the end of the year, 155,000 more than in 1986. Of this total, contract workers in state-owned units numbered 268,700, an increase of 78,900. Self-employed workers in the cities and towns totaled 164,200, up 49,200. The province's gross payroll totaled 5.47 billion yuan, a 12.5 percent increase over 1986. The average cash wages for workers were 1,370 yuan, up 8.2 percent.



Urban and rural savings deposits increased remarkably. By the end of 1987, individuals' bank savings amounted to 9.45 billion yuan, a 34.1 percent increase or 2.4 billion yuan more than the 1986 year-end figure. The average per capita bank savings amounted to 355.62 yuan, 34 percent or 90.19 yuan more than in 1986.

Housing for both urban and rural dwellers improved. In 1987 a total of 3.34 million square meters of housing floor space were built in urban areas and 21.2 million square meters in the countryside.

Social welfare services continued to improve. In 1987 the province had 13 social welfare establishments, providing for 960 elderly, disabled, and orphans in the urban areas who had no other means of support. The collectives in rural areas provided for 35,000 elderly, disabled, and orphans. The rural areas had 729 homes for the elderly, providing for 4,493 people. Urban and rural families who suffered great hardships could find relief and support. Work and study opportunities and conditions for the disabled improved. Great progress was made in supporting the poor and remote areas.

## XI

### Population

Shanxi's birth rate reached a high peak in 1987 and the natural growth rate showed an increase. According to a sample survey of 1 percent of the population, the province's birth rate in 1987 was 20.12 per thousand, the mortality rate was 6.46 per thousand, yielding a natural growth rate of 13.66 per thousand, up from 12.62 per thousand in 1986. The sample survey indicated that by the end of 1987 Shanxi had 27.17 million people, 360,000 more than the 1986 year-end figure.

Notes: 1. All the figures for the gross national product, total product of society, national income, and total rural product of society given in this communique are preliminary statistics.

2. The gross national product, total product of society, national income, and total rural product of society listed here are calculated in terms of 1987 prices, and the rates of growth are calculated according to comparable prices.

3. Gross national product refers to the increased value of both the material productive and nonproductive sectors, and net income from other provinces, not including the value of products and labor service consumed by intermediate units.

4. The total product of society is the sum of the total output value of agriculture, industry, the building trade, transportation, posts and telecommunications, and commerce (including the supply and marketing of materials and equipment and the catering trade). National income is the sum of the net output value of the above five material producing departments.

5. The total rural product of society includes the gross output value of agriculture and the gross output value registered by collective and individually run industry, building trade, transportation, and commerce.

### SMALL-SCALE ENTERPRISES

#### Anhui's Township Enterprises

40060200 Heifei ANHUI RIBAO in Chinese  
12 Feb 88 p 1

[Article by reporter Zhang Mengdu [1728 1322 2629]: "Improve the Large, Transform the Old, Give Impetus to the Small: Anhui's Township Enterprises Speed Up Expansion Process. Province Emulates Guangdong, Fujian, Jiangsu, and Zhejiang, Ascertains Deficiencies, and Seeks a Role in the 'Great International Economic Cycle'"]

[Text] In recent years, Anhui has been very successful in its "four-wheel drive" effort to develop its township enterprises. Meanwhile, striving to increase the scale of operation, it has expanded its key enterprises, transformed the older enterprises, and given momentum to the small enterprises which are run by individual households or association of households.

—Anhui has selected projects carefully, concentrated on key investments, and expedited formation of large, mainstay enterprises. In recent years, Anhui has concentrated its investments in some 667 key enterprises at the township and village levels. Of these new enterprises, 85 have output value of over 5 million yuan, and 27 produce over 10 million yuan's worth of goods a year. The Ningguo Wearproof Materials Factory used to manufacture farm machinery. Guided by market information, it has switched successfully to producing wear-resisting cast iron nodules instead. The move has revived the near-bankrupt factory. It subsequently also has adopted foreign technology to manufacture chromium steel nodules which are 9 times more wear-resistant. The product is well received by the cement, mining, and electric power enterprises; demand far exceeds supply. This factory has been considered one of the province's key investments in recent years. During the past 3 years, 6 million yuan in fixed asset investments have been added, and output value has more than doubled, topping 18.5 million yuan last year. This year, the province has added another 9.95 million yuan to upgrade several tertiary plants which serve as suppliers to this factory. This further increases the factory's output capacity, possibly topping 100 million yuan by the year 1990.

—Anhui has concentrated on the key enterprises and the hot-selling products, and unified to form a regional force. The province has initiated more than 20 regional industries which best utilize local resources. These industries generate more than 200 million yuan in total output value. There are more than 118 thermal instrument and meter plants of various sizes in Tianchang County. The larger plants have output value in excess of

4 million yuan, and the smaller ones generate several hundred thousand yuan a year. Their products are sold in 27 provinces and cities nationwide. Anle Village alone has more than 20 such enterprises; they form an instrument and meter producing syndicate with an annual output value of 20 million yuan, and generate more than 2 million in profit taxes.

—The province has relied on the rich local resources, and vigorously attract foreign capital to create a "snowball effect" to benefit enterprises of all sizes. Fanchang County has 4.1 billion tons of limestone reserve, and has great potential for developing a cement industry. The small cement enterprise set up several years ago was outmoded; the output was small, and quality was poor, and failed to compete in the larger markets. The county party committee and the county government made a solid commitment to make the excavation and building materials industries key industries among Anhui's township enterprises. They spared no effort to establish compensation trades with Jiangsu, Zhejiang, Shanghai, and other regions where there are increasing demands for cement. Within 2 years, they have attracted 11.5 million yuan in capital, and started up more than 20 cement plants with a total of 800,000 ton output capacity. According to statistics, in the last 2 years, Anhui has attracted more than 130 million yuan in foreign funds, and brought in 13,000 personnel, and started 1,646 assorted enterprises.

—Older enterprises have been technologically upgraded, enterprise operations have been expanded, and new products introduced. In 1986 and 1987, Anhui's township enterprises have raised 1.34 billion yuan, and implemented more than 2,900 technological transformation projects. As a result, total output value has increased by more than 1.5 billion yuan. Industrial cutting tools are among Dangtu County's best selling products. They account for one-third of the GVIO of the county's township enterprises. Bowang Township and Xinbo Village are the main centers of production. Technological transformation and renovations have replaced their traditional products of butcher knives, scissors, and planers with cutting and bending machines. They have replaced six generations of new products in succession, and have developed an advanced high speed steel welding technique and a full set of industrial machine tools. Each of the scores of subsidiaries of the Bowang Township Cutting Tools Industrial Corporation has doubled its output value, from around 500,000 yuan to over a million yuan a year.

At present, Anhui's township enterprises want to learn from the experience of Guangdong, Fujian, Jiangsu, and Zhejiang. They want to uncover deficiencies, and are determined to become more liberal-minded and reform-conscious. They are in pursuit of an export-oriented economy, and are concentrating their operations to achieve greater economies of scale. They boldly expand productions, target the bigger markets, and strive to gain a place for their products in the "great international economic cycle."

## Township Enterprises in Liaoning

### Intra-Regional Cooperation Stressed

40060215 Shenyang DONGBEI JINGJIBAO in Chinese  
8 Mar 88 p 2

[Article by Xu Qiang [6079 1730]: "Cooperation With Interior Benefits Township Enterprises"]

[Text] The entry of township and town enterprises into the great international circulation is clearly an excellent way to transfer rural labor force on a large scale. It is in line with both the international economic situation and China's national conditions and has far-reaching strategic significance for achieving economic prosperity rapidly. However, given the characteristics of China's northeastern economic region, township and town enterprises must never overlook cooperation within the region even as they set their sights on the great international economic circulation. In other words, they must fully exploit regional resources and develop processing industries through lateral associations, thereby transforming resource advantages into economic advantages.

The northeastern economic region is well equipped to develop township and town enterprises in many ways. It is the nation's base for heavy industry and raw materials industry. Its old-line enterprises boast qualified personnel and technology. There is a host of foreign trade ports (nine at the moment). The region is thickly blanketed with large and medium-sized cities. There is a full lineup of economic sectors. Nevertheless, township enterprises in the northeast have developed in a highly uneven way thus far and these advantages have not been fully brought into play. In the southeastern part of the region, for instance, township and town enterprises have grown very rapidly. In Jinzhou District in Dalian, Liaoning Province, township and town enterprises account for 70 to 80 percent of the gross value of industrial output, compared to just 5 to 7 percent in the case of township enterprises in Simeng (Shi) in Nei Menggu and certain remote areas in Jilin and Heilongjiang in the northeast. In these places a considerable number of townships and villages basically have no township enterprises. Yet it is exactly such undeveloped areas that abound in resources and desperately need to be developed. In some pastoral areas, in Nei Menggu, for instance, large numbers of livestock die from natural disasters each year, but their fur is not utilized properly. In forests inaccessible by transport, 100,000 cubic meters of birches rot away every year. In developing township and town enterprises, therefore, we must proceed from realities and take the whole situation into consideration. We must first do a good job in joint development within the region. For example, developed areas may cooperate with their more backward counterparts, combining labor-intensive with resource-intensive industries to form a "mini-circulation" within the northeast. That way, it is conceivable that township and town enterprises in the region will

prosper quickly. A number of far-sighted units have already gained a head start by moving before others did. Wusan Township in Dongling District, Shenyang, for example, has become a "friendly township" to the suburbs of Chifeng. In recent years, Shenyang has helped township and town enterprises outside Chifeng to put together 15 projects in technological development and cooperation.

It is a strategic decision to take part in the great international economic circulation. And in the northeast, proceeding from realities and strengthening intra-regional cooperation is an important part of vitalizing township and town enterprises in the region and finding our way into the "great international circulation." Only the achievement of extensive cooperation would lay the foundation and set the stage for gradual entry into the great circulation.

#### **Termed Vital Social Economic Force**

40060215 Shenyang DONGBEI JINGJIBAO in Chinese  
8 Mar 88 p 2

[Article by Wang Anlun [3769 1344 0243]: "Township Enterprises In Liaoning Make Up A Significant Economic Force"]

[Text] Reform and opening to the outside world has injected new life into township and town enterprises in Liaoning. At present, the number of such enterprises has topped 340,000 province-wide, whose combined fixed assets amount to 6 billion yuan, more than that of light industry. Compared to 1978, the total revenues of township and town enterprises and the gross output value of rural industry have increased 600 percent and 420 percent, respectively.

In developing its township and town enterprises, Liaoning emphasizes its characteristics as a heavy industrial base. Apart from oil prospecting and natural gas extraction, for instance, there are township enterprises in all other 39 industries, forming a contingent with a fairly high level of technology, a formidable material base, and a comprehensive industrial lineup. For the province as a whole, the gross output value of township and town enterprises has reached 24.5 billion yuan, more than triple that of agriculture, accounting for 64.5 percent of the gross value of rural social output. Of this, industrial output value totaled 16 billion yuan, 17.9 percent of Liaoning's gross industrial output value; taxes turned over to the state amounted to 1.2 billion yuan, 11.4 percent of the province's overall revenues; and foreign exchange generated by export reached 150 million yuan, about 10 percent of the provincial total. Township and town enterprises also have absorbed over 3 million surplus rural workers. In 1987 they provided agriculture with 300 million yuan in funds, more than what the local governments spent to support agriculture in the same period. Today township and town enterprises have become a pivotal social economic force in Liaoning.

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## **FOREIGN TRADE, INVESTMENT**

### **Cooperation With Canada in Manager Training**

OW0205232288 Beijing XINHUA in English  
1420 GMT 2 May 88

[Text] Beijing, May 2 (XINHUA) — The Canadian and Chinese Governments will turn an enterprise management training center here into a full fledged school, the "PEOPLE'S DAILY" reported today.

The China Chengdu Training Center of enterprise management trained 772 managers in 13 sessions since its founding in June 1983.

In addition to providing 7.63 Million Canadian dollars to the center, the Canadian Government has sent 80 experts to teach, and provided scholarships to 27 Chinese instructors from the center to study in Canada.

### **Computer Official Urges Law on Software**

OW0105122788 Beijing XINHUA in English  
0638 GMT 1 May 88

[Text] Beijing, May 1 (XINHUA)—A law is badly needed to protect computer software if the industry in China wants to catch up with the advanced world, according to an official involved in the industry.

Copied software is easy to get in this country since there is no law in this field, the "CHINA DAILY" today quoted Shao Daxun, president of the China Software Technique Corporation (CSTC), as saying.

Researchers work hard to make software, hoping to earn some money by selling it, but soon find that the programs have been copied by others and sold at cheaper prices, Shao said.

He said they can hardly make up their costs, and they have no right to sue anybody. This makes the situation worse for the already slowly-progressing software industry in China.

CSTC, the first and biggest software corporation in China, is now carrying out research on such a law, but Shao said there is still a long way to go before the National People's Congress can implement such a law.

This is because software is not recognized as a valuable product in China, he said. But in the United States, the software industry had already become a 50 billion U.S. dollars business by 1986.

China just has 35,000 people engaging in software research, while the figure in the United States is close to one million and the U.S. still suffers a lack of personnel.



There is surprising waste even for that small number of people engaged in the software field in China. Many are repeating the same work because of a lack of information.

Commercialization of software is much neglected and few people care about the market. The utilization ratio of software in China is only 15 percent, compared with 85 percent in the United States.

China's computer industry always used to emphasize hardware rather than software. until a few years ago when it realized that hardware development is closely linked with the level of the industry as a whole.

Thus, CSTC was established in May 1984 by the former Ministry of Electronics Industry to deal with the administration of the software industry, the development of software technology and the marketing of software products.

CSTC now has over 30 branch corporations around the country, 10 software research institutes, a training center and two joint ventures, employing a total of 2,000 people.

CSTC has sold software used in machinery, construction, power industry, railways, Chinese character programming and office automation and many other fields.

#### **Hangzhou Customs House Promotes Foreign Trade**

OW3004044188 Beijing XINHUA in English  
1449 GMT 29 Apr 88

[Text] Hangzhou, April 29 (XINHUA) — The Hangzhou customs house in Zhejiang province has worked out some new policies designed to aim the local economy at foreign markets.

Under the new policies:

— Preferential customs policies will be granted to those enterprises processing imported materials and most raw materials, equipment, and parts can be imported duty free.

— Enterprises meeting the necessary customs requirements can apply to set up bonded warehouses and factories.

— Import-export procedures will be simplified and customs offices will even dispatch officers to enterprises to complete customs inspections.

— More consultancy services will be available for enterprises to help them do more business with foreign clients.

A customs officer said, last year the hangzhou customs house handled 5.57 Million tons of cargo and 1,800 ships, which were increases of 6 and 59 percent respectively over the previous year's figures.

#### **Inland Provinces To Facilitate Trade Through Jiangsu**

OW3004065888 Beijing XINHUA in English  
1510 GMT 27 April 88

[Text] Zhengzhou, April 27 (XINHUA) — Four inland provinces — Henan, Shaanxi, Gansu and Anhui — have decided to build nine berths at Lianyungang Harbor to facilitate their imports and exports.

The berths, each accommodating ships of 10,000 dwt, will be put into service before 1993.

The state will pay for the foundations of the harbors and the individual provinces will pay for the surface structures.

Henan, whose cargo makes up about one-fifth of the harbor's total, will build five berths. It plans an investment of five million yuan (1.35 million U.S. dollars) during the Seventh Five-Year Plan period (1986-1990).

Lianyungang, which is in Jiangsu Province, currently has 18 berths capable of handling 20 million tons of cargo annually. By the turn of the century, the harbor will have 90 berths with an annual capacity of 50 million tons.

#### **Tianjin's Report on Foreign-Invested Enterprises**

SK0305070188 Tianjin City Service in Mandarin  
2330 GMT 18 Apr 88

[Text] To date, the number of Chinese-foreign joint ventures and cooperative enterprises, and enterprises run exclusively with foreign investment in our municipality has reached 242, of which 136 have opened business and gone into operation. Joining this rank of enterprises to carry out economic and technological cooperation with foreign countries are not only state enterprises but also collective and individual ones. According to statistics compiled by mid-April, the investment made by these enterprises totaled more than \$570 million, of which 44 percent was made by foreign firms, thus laying a solid foundation for our municipality to directly use foreign funds more quickly in the future.

Since the fourth quarter of last year, Tianjin has created an upward trend in absorbing foreign investment. Relevant departments estimate that the number of enterprises invested in by foreign firms to open this year will reach 180, the number of their staff members and workers will be no fewer than 15,000, and their production and business scope will become increasingly larger. To catch up with the developing situation, competent departments of the municipality are adopting measures to deepen the reform of the management system, and to raise their work efficiency by eliminating bureaucratic



workstyles first to ensure that managerial activities of the foreign-invested enterprises in Tianjin are carried out according to international practice, and are safeguarded by laws.

## ECONOMIC ZONES

### Industrial Base in Tianjin Attracts Investors

HK2904105588 Beijing CHINA DAILY  
in English 29 Apr 88 p 1

[By staff reporter Xu Yuanchao]

[Text] Foreign investors are flocking to a piece of levelled land looking for the opportunity to build export-oriented enterprises on the Bohai Sea, about 50 kilometres southeast of Tianjin.

The 0.77-square-kilometre area is part of the Tianjin Economic and Technical Development Zone (TETDZ), about 7 kilometres from New Harbour which houses China's largest container wharf. It has been pencilled in as an industrial base for the China International Trust and Investment Corporation (Citic).

According to Citic's development programme, about 40 to 60 enterprises staffed by 5,000 to 6,000 people are planned for the area. It will generate an industrial output value of 600 million yuan by 1991 when construction is completed, said Yin Delin, manager of the Citic Tianjin Industrial Development Company.

The manager said Citic had so far plunged nearly 50 million yuan into the construction of infrastructure in the area so as to create "a better investment climate for foreign investors."

Construction of infrastructure, including supplies of water and electricity, rain and sewage drainage works, roads, railway lines and telecommunications facilities, is expected to be completed by the end of the year.

Yin said contracts on four joint ventures have been signed and another six are expected to be signed within the year, by which time foreign investment will total \$25 million.

### Fujian Opens Tax-Free Market

OW0105133488 Beijing XINHUA in English  
1208 GMT 1 May 88

[Text] Fuzhou, May 1 (XINHUA)—This capital of Fujian Province today opened a marketplace where shops will be free from business and income taxes for the first three years.

Prices will float according to supply and demand in the marketplace designed to attract businesses from other parts of China and abroad, Vice Mayor Gong Xiong told XINHUA.

Fuzhou is one of 14 coastal cities authorized to practise special policies to attract domestic and overseas investment. To this end it has designated an economic development zone where the tax-free marketplace is located.

All shops in the new marketplace were jammed with people, apparently because there were goods in short supply elsewhere such as color TV sets, name brand bikes and "Maotai", the best known Chinese liquor.

Space available at the market is large enough for 90 shops. But, said Gong, already 500 companies in other parts of China have asked to rent space to start shops.

In view of this, Gong added, the city will open another tax-free marketplace in July, and it will be large enough for 300 shops.

### Shenzhen Works To Meet Foreign Investors' Needs

OW2904112688 Beijing XINHUA in English  
0203 GMT 29 Apr 88

[Text] Shenzhen, April 29 (XINHUA) — The Shenzhen Special Economic Zone will spend an additional 2.2 billion yuan (595 million U.S. dollars) to make the investment environment even better for foreign investors.

According to Li Chuanfang, Shenzhen's vice-mayor, the money will be used to improve power and water supplies and drainage, add transportation and communications facilities, and build new factories.

"The reason for the investment increase is to meet the needs of foreign investors," the vice-mayor said, adding last year, the city sold out all the available industrial workshops and commercial use buildings.

Beginning this year, Shenzhen will charge for the use of public utilities and drainage facilities to increase funds for infrastructure construction, said Li.

"The municipal government is working hard to build the city into the country's best place for foreign investment," Li said.

## LABOR

### Trade Union Reform in Liaoning

40060212 Beijing GONGREN RIBAO in Chinese  
20 Feb 88 p 1

[Article by Su Shuqiao [5685 2885 5062]: "Trade Unions Should Be Allowed To Operate Independently"]

[Text] The standing committee of the Liaoning Provincial CPC Committee discussed trade union work recently and put forward nine suggestions regarding trade union reform:

1. Straighten out the relations between trade unions, on the one hand, and the party and government, on the other. The trade union should accept the party organization's ideological and political leadership and cooperate with the administrative department on an equal level. It should operate independently and both support the administration and exercise democratic supervision over it.

2. Even as it promotes economic construction, trade unions should protect workers' legitimate interests, improve their caliber, participate in democratic management, and raise work efficiency.

3. The cadre appointment system should be changed gradually. Basic-level trade union cadres should be directly elected or chosen through by-elections. Election results should be reported to the higher authorities for approval.

4. The independence of trade union organizations should be maintained. They should not be abolished or merged in the course of administrative reform.

5. The affiliation of a business run by a trade union should not be changed at will. Assets should not be appropriated and trade union funds should be managed by the union itself.

6. The affiliation of the basic-level trade union should be determined in accordance with the principle of combining industry with locality. It may be subordinate to the locality where it is located or to its industry, depending on the circumstances of the case.

7. Organization and staffing should be streamlined in accordance with the spirit of the CPC Central Committee, taking realities as the starting point. A large or medium-sized enterprise should have a fair number of full-time trade union cadres, while a small enterprise should equip itself with trade-union cadres as actual circumstances require. Part-time trade union cadres should be given the necessary working conditions. Part- and full-time trade union chairmen at all levels should continue to enjoy the pay and benefits they are entitled to under CPC Central Committee Circular 24 (1981).

8. Efforts should be made to make it possible to combine part- and full-time work. Trade union members should be allowed to run a trade union so as to make the most of union activists.

9. When a municipality or county (district) abolishes a bureau or company trade union, it may set up an industrial union in accordance with the principle of combining industry with locality, thereby maintaining the continuity of trade union work.

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## TRANSPORTATION

### Seven New Types of Ships Developed

OW241145 Beijing XINHUA in English

1040 GMT 22 Apr 88

[Text] Beijing, April 22 (XINHUA)—China is developing seven new types of ships including special vessels for liquified gas, chemical liquids and super oil tanker, according to China State Shipbuilding Corporation today.

Since 1985, the corporation has developed 260 kinds of new ships and modernized a large part of its fleet.

The corporation has begun to export new designs of vessels. Large container ships and multi-functional vessels have also been exported to Singapore, Federal Germany, Pakistan, Bangladesh, Czechoslovakia and Hong Kong.

While making an effort to improve ocean-going vessels, the corporation has been studying energy-saving techniques.

Breakthroughs have been achieved in the development of chemical-carrying ships, self-dumping vessels and hovercraft.

To ease the strain on domestic transport and solve the problem that most of China's rivers are shallow and cannot carry big vessels, the corporation has successfully developed wide-bodied vessels which are able to sail in shallow waters. River-ocean freighters have also been launched.

## AGRICULTURE

### New Methods for Selling Farm Products

HK0305145688 Beijing JINGJI RIBAO in Chinese

6 Apr 88 p 2

[Article by Niu Tiehang (3662 6993 5300): "Futures Trading—A New Thought on Reforming the Purchase and Sales of Agricultural Products"]

[Text] Quite a number of top economic experts in Beijing have recently been engaged in the study of futures trading. Carrying out futures trading in China's rural areas, they remarked, is an important method of stabilizing the prices of agricultural and sideline products which have been fluctuating for years. It is necessary to grope for this "stone" in the course of practice. The relevant leading comrades have also taken a deep interest in this matter.

The prices of agricultural and sideline products such as grain, cotton, meat, and eggs have been going up and down for the last few years, thereby making agricultural production and market supplies unstable. There are many factors causing the emergence of this situation,

bwt one important factor is that there are only spot transactions in the circulation of agricultural and sideline products. As a result, the peasants determine what and how much to produce in the next round of production according to current prices and market supplies. Take pig production as an example. Since the second half of last year many peasants have responded to the shortage of pork by deciding to increase pig production. However, they do not know how much the market needs and how they should arrange the next round of production. As a result, as some people have predicted, the supply of pork will exceed demand, and it will be "difficult to sell pork" because the prices of pork will drop. In such cases, the peasants will consider reducing the output of pigs in the next round of production, and this decrease in production will possibly lead to a pork shortage and pork price rises. It will be "difficult again to buy pork." Is there no way for the peasants to determine how much to produce in the next round of production according to predetermined supply and demand (including predetermined prices), instead of basing it on the present situation of supply and demand? There is. The method is to form an agricultural futures trading market so as to allow the peasants to rationally arrange their production according to predetermined prices.

Futures trading is different from a spot transaction. It refers to transactions conducted on prescribed dates, in designated places, and at predetermined prices, with a small amount of guarantee money paid in advance. In this trading, the seller is required to provide the buyer with commodities of satisfactory quantity and quality. A spot transaction refers to a direct exchange of money with commodities, whereas futures trading is the selling and buying of contracts. Generally, the buyer and the seller will sign a contract that is legally binding on both sides, and delivery of commodities will be conducted according to the contract. Futures trading is also different from the existing contracted purchase; the contract for futures trading predetermines the prices of commodities. These predetermined prices are fixed by the futures trading market with the direct participation by the producer and the consumer. The peasants can set the scale of production according to the predetermined prices, without worrying about price fluctuations. All this will lead to the stabilization of the prices of agricultural and sideline products.

How should a futures trading market be established? The writer is of the opinion that, first, it is necessary to consider the site of the futures trading market. According to the experiences of some foreign countries in running futures trading markets, a futures trading market is not necessarily near a production basis but must be established in a commodity distribution area that offers convenient means of transportation and easy access to information. Examples are futures trading markets in Chicago, London, Hong Kong, and Singapore, which are all equipped with a highly-efficient telephone and telecommunications system. In the Chicago futures trading

market, the biggest in the world, 20 contracts for soybeans are concluded in 1 minute, each for 5,000 bushels, which are equal to a wagonload of soybeans. This adds up to about 60,000 or 70,000 contracts a day. Suppose the quantity actually delivered is 10 percent of the number of the contracts concluded, 6,000 to 7,000 wagonloads of soybeans are delivered a day. Such large-scale futures trading would have been unimaginable without developed transport facilities and a high storage capacity.

Second, it is necessary to make a correct choice of commodities for futures trading. Generally speaking, commodities suitable for futures trading: 1) Commodities needed in bulk by the market; 2) commodities vulnerable to price fluctuations; 3) commodities with fairly long production periods; and 4) nonfresh commodities that are easy to store and transport. A relevant law and regulations should be passed as a guarantee for futures trading, so as to prevent illegal activities and speculation. This law should stipulate the standardization of contracts as well as the methods of transaction, delivery, and settling accounts, so as to facilitate selling and buying.

Fourth, it is necessary to formulate a full set of fund (including foreign exchange) management systems so as to cope with the swift transfer of a large amounts of money for transactions concluded during futures trading. A contract for futures trading is usually concluded in about half a minute by waving hands; there is no time for negotiations.

The prices of agricultural and sideline products in our country have been going up and down. This is similar to the traffic in Beijing's Changan boulevard, which is smooth one moment and becomes jammed the next. Traffic jams on Changan boulevard have declined recently as a result of the installation of electronic notice boards. Like improving road conditions and limiting the number of cars on the streets so as to resolve traffic jams, the fundamental way to stabilize the fluctuating prices of agricultural and sideline products is to increase supply and remove factors restricting agricultural production. Like the electronic notice boards, futures trading will possibly play a positive role in stabilizing the prices of agricultural and sideline products.

#### Survey of Rural Finances in 1986

40060186b Beijing NONGMIN RIBAO in Chinese  
20 Jan 88 p 2

[Report by CPC Central Committee Rural Policy Research Office, State Council Rural Development Research Center, Rural Social and Economic Survey Office: "The Accumulation and Circulation of Capital Funds in the Rural Areas; 1986 Rural Regular Observation Survey Report (7)"; First 3 paragraphs are source-supplied abstract of the article]

[Text] There are simultaneous surpluses and shortages of capital funds. The rural areas have enhanced their ability to raise funds independently, and the total amount of



such funds has increased, but their capacity to accumulate remains low. Moreover, there is an imbalance of funds among districts and peasant households. As for funding sources, the peasant households and joint ventures primarily raise funds on their own, while village enterprises chiefly rely on loans.

People-to-people loans are gradually becoming more popular, and capital fund markets should be opened up. Of peasant household and joint venture loan funds, 67.7 percent and 26.5 percent, respectively, derive from interpersonal loans. We should formulate and strengthen relevant laws and regulations to ensure the healthy development of such loans.

Peasant capital funds primarily go toward consumption. Factors which affect peasant production investment include the influence of traditional attitudes toward consumption. Some of the peasants still do not put full stock in political policy. In addition, where authority to decide investment policy is decentralized, there is a paucity of policy guidance and coordinated cooperation. We must act on these matters, and motivate the peasants to invest in production.

#### **Capital Fund Surpluses and Shortages Exist Simultaneously**

7.1 The total amount of rural capital funds has increased, but a shortage of such funds remains a significant limiting factor in developing the rural economy. It is clear from the regular observation survey that in the last 2 years the ability of the rural areas to raise funds on their own has been enhanced, and surplus funds have gradually increased. Fund increases at the village level primarily are manifested in a 66.7 percent growth over 2 years in the value of productive fixed assets at the disposal of the survey village collectives, and in a 42.5 percent growth in the value of such assets available to the peasant households. During the same time period, according to a sample household survey, peasant household circulating capital grew 29.2 percent, 11.6 percent of which was attributable to an increase in loans. Average bank savings of the sample households increased 18.5 yuan to 449.2 yuan from the beginning of 1986 to the end of the year, and average household ready cash increased 237 yuan to 624 yuan.

However, regardless of whether an economic cooperative or peasant household, the ability of either to accumulate on its own remains low, and accumulation of rural capital is far from being able to satisfy the requirements of developing a commodity economy. As for capital fund investment by the survey village economic cooperatives, in 1986 only 53,100 yuan per village was applied to collectively managed expanded reproduction and industrial aid to agriculture. Of this amount, 24,300 yuan was used to purchase productive fixed assets. Nearly 44 percent of the survey villages in 1986 invested not a single cent themselves in expanded reproduction. Some of the village enterprises and joint ventures were

forced to close down due to insufficient capital funds. For example, of the 16 joint ventures surveyed which shut down in Zhujia Village, Gongxian County, Henan Province, 10 did so because of insufficient capital funds. The ability of peasant households to invest capital funds is extremely limited as well. The 1986 sample households had an average gross income of 3,713.9 yuan which, after deducting 114.2 yuan in family management expenses, 64.5 yuan in taxes, 84.1 yuan to be retained by the collective, 93.8 yuan to procure fixed assets, 2,024.9 yuan in living expenses, and 168.9 yuan in other non-loan disbursements, amounted a surplus for the year of 263.5 yuan. With an average of 4.8 people per household, this meant 55 yuan per capita. Relying solely on this small fund surplus to further expand reproduction or improve the living standard obviously is grossly inadequate.

7.2 The capital fund shortage also is manifested in the imbalance of funds among districts and peasant households. In terms of the degree of economic development, while 21 percent of the survey villages were relatively developed economically, they accounted for 51.7 percent of total fixed asset value, and 61.6 percent of gross income from all operations; on the other hand, the 25.9 percent of survey villages which were not economically developed accounted for only 9.62 percent of the total value of fixed assets, and 6.54 percent of total gross operational income. In the case of peasant households, after various expenditures were deducted, the households with net income per capita in excess of 700 yuan (20.8 percent of the sample households) had a surplus of 69 yuan per capita; households with a net income per capita of 300-700 yuan (47.9 percent of the sample households) had a surplus of 35.2 yuan per capita; households with a net income per capita less than 300 yuan (31.2 percent of the sample households) had expenditures of 54.3 yuan above income, and these households were unable to make ends meet. In terms of ready cash, only 51.9 percent of the sample households had any bank savings, while 48.1 percent had no savings at all. As for loans, 81.8 percent of the sample households had obtained no loans whatsoever. It is clear from the way the rural capital funds are distributed that overall there is an acute shortage of such funds, and while some districts and peasant households enjoy a surplus of funds, idle capital funds have yet to be effectively accumulated.

7.3 Different economic entities, in their financing, have different capital fund sources: peasant households and joint ventures mainly rely on themselves to raise funds; village-run enterprises, on the other hand, favor borrowing. Of the 1986 sample households, the amount of cash spent by the average household on production and livelihood was 2,484.7 yuan, of which 302 yuan, or 12.2 percent, derived from credit and people-to-people loans, while the balance of 81.8 percent was self-provided. At the end of 1986, each joint venture on average employed 46,400 yuan in capital funds, 63.2 percent of which was self-provided, with loan funds making up the remaining

36.8 percent. At the same time, capital funds for the average village-run enterprise totaled 215,600 yuan, 49 percent of which was self-provided, with 51 percent deriving from loans. Of the loans, credit accounted for 41.4 percent, with the remaining 58.6 percent coming from people-to-people loans, temporary receipts, and rental capital.

#### Development of Interpersonal Credit

7.1 People-to-people loans are gradually becoming more popular, and capital fund markets should be opened up. In 1986, 24.6 percent of the sample households engaged in interpersonal borrowing, and 8.9 percent loaned money out. Peasant household capital fund borrowing primarily took the form of interpersonal borrowing (64 percent), and the household average was 193.4 yuan; credit accounted for only 36 percent, with a household average of 109 yuan. Of capital funds borrowed by joint ventures, 26.5 percent derived from interpersonal loans, an absolute amount of 4,526 yuan. These data show that people-to-people loans have become an important source of funds for rural financing.

The principal forms of people-to-people loans are outlined below. One form is mutual help loans between relatives and friends, most of which are small, short-term, and involve little or no interest. A second form is loans between peasant households through economic service companies or through the peasant mutual aid fund which some villages have and which is managed by economic cooperatives or enterprise associations. These loans generally are large, long-term, with interest rates identical to, or slightly higher than, those of credit unions. A third form is high interest loans between peasant households, or between a peasant household and a joint venture, which generally involve a monthly interest rate of 3 to 4 percent. There is an objective necessity to the development of interpersonal credit in the rural areas. With the present economic system possessing diverse economic components, various management approaches, and multiple channels of circulation, it is only natural that an appropriate credit system emerge which exhibits diverse components, various approaches, and multiple channels. The rise of interpersonal loans is just such an economic structure, and in an environment where the credit union is the sole means of circulating funds, where saving and lending by the masses is inconvenient, and where the amount of loan funds is small, it is an effective means to channel idle capital in the rural areas to where it will help to develop commercial production. As a result, in expediting reform of the financial system, we should gradually open up capital fund markets appropriate to the means of production markets and labor markets in the rural areas, and develop the interpersonal credit industry. We should formulate and strengthen relevant laws and regulations regarding interpersonal loans, to provide a legal basis for a healthy development of such loans.

7.5 The regular observation survey shows that some areas in recent years have experienced breakthroughs in circulating collective capital funds. Dongchang Village, Jurong County, Jiangsu Province, was a 1984 survey site. Starting in 1985 it began to settle its financial affairs, and adopted the "turning debts into loans" method to recover unpaid debts and temporary payables. In addition, most of these funds were entrusted to the village peasant economic service company for circulation throughout the village, bringing "dead money" to life and increasing its value through circulation. In 1986, this province, on a trial basis, gradually extended the collective funding model over the entire area, and by the end of the year, collective funds totaled 629 million yuan, or 2.6 times the collective credit which the banks and credit unions extended to village units during the same time period. Interest alone brought 29.51 million yuan in increased revenue to the collective fund. In areas with a developed collective economy, the significance of circulating collective capital funds cannot be overestimated with regard to enlivening the rural capital fund market and developing interpersonal credit.

#### Capital Fund Investment Trend and Investment Climate

7.6 Peasant capital funds primarily have gone toward consumption. In 1986, the average production expenditure of the sample households was 231.19 yuan, or 32.1 percent of total expenditures. Average per capita subsistence expenditures was 422 yuan, or 58.7 percent of total expenditures. Compared to 1984, production expenditures increased 15.7 percent, but dropped 3.9 percent as a proportion of total expenditures, of which the absolute amount applied to the purchase of productive fixed assets dropped 31.8 percent. Subsistence expenditures rose 37.7 percent, and this rate of increase outstripped the rate of increase in both per capita net income and production expenditures. Within the subsistence expenses, expenditures for housing and essential articles increased 72.5 percent and 2.43 times, respectively, over 1984; these amounted to increases of 4 percent and 3.9 percent, respectively, as a proportion of total expenditures.

As for production investment by the sample households, family operations accounted for 91.5 percent of expenses for the year, of which 8.5 percent was applied to the purchase of productive fixed assets. Of the family operations expenses, agricultural expenses accounted for 70.9 percent (38.6 percent for crop growing and 30.3 percent for animal husbandry), and the secondary and tertiary production industries accounted for 12.7 percent and 16.4 percent, respectively. At the end of 1986, peasant household productive fixed assets primarily included transport machinery (25.5 percent), production buildings (23.8 percent), and livestock (28.9 percent), while those applied to construction of basic agricultural installations accounted for very little. Of all the survey villages, the households of only 11 villages individually

invested in rebuilding 55 electrically-pumped wells, and the peasant households of 17 villages individually rebuilt 59,900 meters of irrigation and drainage ditches.

7.7 Eliminate factors which affect peasant investment in production, and create a good investment climate. Production investment is the number one means to stimulate economic growth. Reducing peasant production investment restricts the development of a commodity economy in the countryside. Many factors influence the peasants' investing in production:

— Traditional consumption attitudes are still governing peasant household investment behavior. After individual household management was implemented in the countryside, the peasant family changed from a purely consuming unit to an entity with both consuming and producing functions. As a subsistence unit, peasant household consumption attitudes are strong because of the influence of customs; on the other hand, as a producing unit, many peasant households have not yet truly realized their fundamental position in operations, and they have a weak attitude toward investment. Consequently, it is essential that we enhance the peasant households' concept of accumulation, and gradually help them to establish an accumulation mechanism at the microlevel.

— Some peasant households do not put full stock in political policy, which is yet another factor which affects production investment. With this mentality, they feel that the best way to insure savings is to invest capital funds in their livelihood, especially in housing. In addition, policy in some areas is truly impracticable, and contractual relations need improving, which aggravates to varying degrees the peasant mentality outlined above. Consequently, we must revitalize the legal system, stabilize contractual relations, maintain the continuity and solemnity of policy over the long term, and enable the peasants to invest capital funds in production without apprehension.

— Where authority to decide investment policy is decentralized, there is a paucity of policy guidance and coordinated cooperation, which also influences peasant household investment in production. After management was turned over to individual households, the peasant household's capacity for accumulation was enhanced, but authority for deciding investment policy was decentralized. The peasants, in their investment, commonly give first consideration to immediate benefits, and act to satisfy short-term needs. Their willingness to expand reprocessing often is not up to the social requirement for investing in production. If there is no effective policy guidance, and no coordinated cooperation, it is impossible for single households to undertake mid- or long-term, or medium- or large-scale, basic construction in agriculture. As a result, we must strengthen the role of policy guidance and coordinated cooperation, move the contractor from strictly personal interest to a sense that he will benefit from investing in the land, gradually

create a favorable investment climate, and help the peasants to understand the macroeconomic trend. This is the only way to bring the peasants to invest the limited capital funds in production, and mitigate the contradiction of developing a commodity economy in the rural areas with insufficient capital funds.

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#### 1988 Timber Imports

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5 Mar 88 p 2

[Excerpt] In 1988 China plans to import 8,600,000 cubic meters of timber, of this amount 6,800,000 cubic meters will be transported by sea, a 15.8 percent increase over 1987 and 1,800,000 cubic meters will be transported on land, a 34.3 percent increase over 1987. The Soviet Union will supply 3,300,000 cubic meters of logs and pulpwood, an increase of 300,000 cubic meters over 1987.

#### Problems in Sugar Production Analyzed

40060170 Kunming JINGJI WENTI TANSUO  
[INVESTIGATION OF ECONOMIC PROBLEMS] in  
Chinese No 1, 20 Jan 88 pp 39-42

[Article by Li Zuoyan [2621 0155 1484]: An Inquiry Into Sugar Production and the Benefits of a Chinese Sugar Industry]

[Text] In recent years sugar production has declined substantially in China. According to statistics, in the 1986-1987 production year, sugar crops were harvested on 18.30 million mu of land in China, representing a decline of 850,000 mu from the previous year. Last year 17.60 million mu of sugar crops were planted, for a further decline of 2.55 million mu from the previous year. Breaking these figures down, we see that sugarcane growing area dropped 1.05 million mu and sugar beet growing area declined 1.5 million mu. Accompanying this drop in sugar-crop growing area, sugar output also decreased considerably. The situation is grim, and it is still developing. Because of the severe shortage of raw materials, a number of sugar refineries have already closed and more closings are expected this year.

As for the reason for the decline in sugar production, a preliminary analysis reveals the following factors:

A. Sugar prices and profits are depressed, so sugar growing is less rewarding than grain farming. The state has not readjusted sugar procurement prices since 1979, when they were set at 43.72 yuan per ton for sugarcane and 76 yuan per ton for beets. To stimulate farmer enthusiasm for growing sugar crops, growing areas and public treasuries at different levels have offered price subsidies on sugar crops, which the refineries have settled upon farmers on a one-time basis. Thus, actual per-ton procurement prices for sugar crops during the 1986-1987 production year averaged 74.82 yuan for



sugarcane and 91.91 yuan for sugar beets (see Table 1), or 71.13 percent and 20.94 percent, respectively, above list prices. However, periodic grain prices are frequently revised and the proportion of grain purchased through negotiated procurement is constantly growing. In 1987 the combined average price for grain purchased under quotas and through negotiation reached 19.99 yuan per dan for long-grained nonglutinous rice and 18.2 yuan per dan for corn. Growing sugar crops, on the other hand, is labor intensive, time-consuming, and expensive. What's more, the cost of production materials has risen, causing sugar production costs to rise constantly and resulting in low material returns on sugar-crop cultivation. According to the Ministry of Commerce's May 1987 survey of Heilongjiang, corn farming requires 8 man-days of labor per mu and soybeans farming requires 6 man-days per mu, whereas growing sugar beets requires 11 man-days per mu. As for per-mu material costs, corn costs 15.6 yuan and soybeans cost 13.2 yuan to grow, whereas sugar beets cost 13.8 yuan to grow. Figuring 2 yuan per man-day for labor, total per-mu production costs come to 40 yuan for corn and 26 yuan for soybeans, but 44 yuan for sugar beets. Moreover, sugar production, particularly sugarcane production, occurs predominantly in economically developed regions and regions where sugarcane is in serious competition with grain for growing area. Growing areas broadly reflect the drop in sugar prices and profits. According to the above prices, the price parity between sugarcane and long-grained nonglutinous rice is 1:0.19, which is down from the previous production year. The price parity between sugar beets and corn is 1:0.25—it has dropped to an historic low (see Table 2). According to a 1986 survey, unirrigated sugarcane farming in Yulin, Guangxi yields an income of only 196 yuan per mu, whereas switching to cultivation of hybrid corn followed by sweet potatoes yields 350 yuan per mu. In Guangdong, sugarcane cultivation yields a net profit of only about 100 to 140 yuan per mu, or 20 yuan less than paddy cultivation yields, but it requires twice as many man-hours of labor. In Heilongjiang and Jilin profits on sugar beet farming are 41.45 yuan per mu lower than profits on corn farming, 34.68 yuan per mu lower than profits on soybeans, and 96.45 yuan per mu lower than profits on paddy.

B. We have failed to manage pricing on sugar crops and sugar. Right now local public coffers have to bear heavy subsidies on each ton of sugar produced: 203 yuan in Guangdong, 104 yuan in Guangxi, 286 yuan in Fujian, 36 yuan in Nei Monggol, and 60 yuan in Xinjiang. Subsidies specifically on the procurement price work in the following way: In Guangdong, for example, the actual price of sugarcane was 72.72 yuan per ton in 1985, broken down into the following elements: 1) a list price of 41.93 yuan 2) an 8 yuan subsidy above the provincial fixed price; 3) 17.23 yuan in various incentives in the form of cost differential allowances on sales; and 4) 5.56 yuan in local, municipal, and county subsidies. Of the 30.79 yuan price differential between the list price and the actual price, 9.7 yuan was paid by the state to support its policy of "one ton of grain for each ton of sugar," and

for incentives in the form of cost differentials on sales of chemical fertilizer. The additional 21.09 yuan was paid by provinces, prefectures, municipalities, and counties. Guangdong produced 1.95 million tons of sugar that year—one ton of sugar for each 9.45 tons of sugarcane—and paid out a total of 388,636,000 yuan. At the same time, the more sugar a province or autonomous region transfers out, the greater the subsidy burden it bears on behalf of the selling region. For example, in the 1985-1986 production year Guangdong transferred out a total of 1.25 million tons of sugar. Local treasuries provided subsidies of 250 million yuan, and after deducting the central government's 150 million yuan subsidy for price differentials on grain as an incentive for sugar transfers, the net subsidy for marketing regions was 100 million-plus yuan. In the 1985-1986 production year Fujian transferred out 190,000 tons of sugar. After deducting central government price differentials on supplemental grain as an incentive for sugar transfers, the selling regions received a net subsidy of 35 million yuan. This affected production initiative in the provinces and autonomous regions that produce sugar.

C. Adjustments in policies linking sugar and grain have reduced peasant incomes.

1. During the 1981-1982 and 1982-1983 production seasons, the central government calculated the sugar-grain link—namely the "one ton of grain for each ton of sugar" incentive offered to sugar crop farmers that allowed them cost differentials on grain sales—according to the price differential between negotiated and state monopoly procurement prices. For example, for each ton of sugar it transferred to the state, the government granted Guangdong 284.244 yuan in incentive cost differentials on grain sales (hereafter this will be referred to as "cost differentials"). In the 1983-1984 and 1984-1985 production years the state switched to calculating the cost differentials according to the price differentials between the excess purchase price and the state monopoly procurement price. Under this method, the state granted Guangdong 139.5 yuan in cost differentials for each ton of sugar it transferred. In the 1985-1986 production year the state again changed its method of calculation, basing it on the price differential between the "inverse 3:7 ratio" and the state monopoly procurement price. Under this method, the state granted Guangdong only 97.7 yuan in cost differentials for each ton of sugar it transferred. State-disbursed incentive cost differentials on grain sales decreased repeatedly. (Although the central government already granted Guangdong 30 million yuan in subsidies, a subsidy averaging 24 yuan per ton and totalling 121.7 yuan, this is only for one family.) This has had a certain effect on production.

2. In 1986, when grain was in short supply, many sugarcane-producing regions switched from their previous method of paying peasants with grain for sugarcane sold to the state to one of only granting grain cost differentials. When the market price for grain is higher than the procurement price based on the "inverse 3:7

ratio," peasant expenditures on grain rations increase. In order to resolve the grain ration problem, peasants will convert some sugarcane land into grain land.

3. There is little chemical fertilizer to use for sales incentives, and there is no guarantee of receiving any. Beginning with the 1985-1986 production year, the Ministry of Agriculture, Animal Husbandry, and Fishery revised its methods of awarding fertilizer sales as incentives to sugar farmers and granting fertilizer allowances to encourage sugar transfers. The original method was to award 20 jin of incentive chemical fertilizer sales for each ton of sugarcane produced, and to grant 300 jin of chemical fertilizer allowances for each ton of refined sugar transferred. This method was changed to one of using the actual average for the 3 years from 1982 to 1984 as the base for fulfilling contracts. As a consequence, the amount of local incentive fertilizer for sugarcane growers declined correspondingly. In Guangdong, for example, it has decreased more than 200,000 tons. Moreover, the method of distributing chemical fertilizer has changed so that now, after farmers have contracted with the state, the chemical fertilizer that they should get for sugar crop production cannot be guaranteed. Often the fertilizer is unobtainable just when the farmers need it most, and when remittance time comes around the cane-cutting season has already arrived. This is obviously bad for production.

4. Because farmers are unenthusiastic about growing sugar crops, management is extensive. As a result, sugar content and per mu crop yields fluctuate and do not improve, or may even deteriorate. Moreover, they are very uneven from region to region. In 1985 sugarcane production worldwide averaged 4 tons per mu, as follows: 5.63 tons per mu in Indonesia, 5.47 tons per mu in the United States, and 5.3 tons per mu in Australia. China should leap to the front rank of sugarcane producers—Xianyou and Longhai Counties in Fujian and Shunde, Fanyu, and Denghai Counties in Guangdong all produce more than five tons of sugarcane per mu. But in 1985 we actually averaged 4.88 tons per mu in Fujian, 3.64 tons per mu in Guangdong, 2.96 tons per mu in the Guangxi Zhuang Autonomous Region, and 3.81 tons per mu in Yunnan. Nationwide, the average yield was 3.56 tons of sugarcane per mu. This is only about 81 percent of the world average. In 1985 worldwide sugar beet output averaged 2.16 tons per mu, as follows: 3.78 tons per mu in France, 3.67 tons per mu Japan, and 3.07 tons per mu in the United States. In China, Heilongjiang's sugar beet yield was at its highest in 1983, at 1.019 tons per mu, and this had dropped to 0.718 tons per mu by 1985. In the Nei Monggol Autonomous Region 1985 was a record year, with 1.689 tons of sugar beets produced per mu. In Jilin the high point of 1.28 tons per mu reached in 1980 fell to 0.844 tons per mu by 1985. Nationwide, our average sugar beet yield was 1.06 tons per mu in 1985, equal to only about 49.12 percent of the world average. In addition, the sugar content of sugar crops has been low for some time, and it has been declining (see Table 3). For example, in France the beet

sugar content is 16 to 18 percent, whereas in China it is only 15 percent. In recent years our cane sugar content has dropped 0.5 to 1 percentage point and our beet sugar content has decreased 1.5 percentage points. This has also led to a drop in total production.

5. In recent years China has been building and putting sugar refineries into operation and building up production capacity at a rapid pace. In 1985 there were 520 sugar refineries in China, 92 more than in 1980, when there were 428. Production capacity measured 5.81 million tons, or 550,000 tons more than in 1980, when production capacity was 3.06 million tons [as written]. This has exacerbated the shortage of raw materials. Among new refineries especially, there are few large enterprises but a great many small and medium-sized ones. In Guangdong, for example, there are now 151 sugar refineries, of which 55, or 36.4 percent, are large enterprises and 96, or 63.6 percent, are small or medium-sized enterprises. The small refineries are in contention with the large ones. In Fujian many small new refineries have been built in recent years, leading to a 75 percent drop in utilization of plant capacity at the advanced Zhangzhou Sugar Refinery. Moreover, most small and medium-sized enterprises are run by prefectures, cities, or counties, so for the most part prefectures, cities, and counties are unwilling to transfer sugar crops to other areas. But on the other hand, small and medium-sized enterprises face high costs, low outputs, and substantial losses. In Guangdong, for example, a ton of sugar costs 683.47 yuan at a large enterprise and 775.23 yuan—or 13.43 percent more—at a medium sized enterprise. At a small enterprise a ton of sugar costs 836.07 yuan—22.33 percent more than at a large enterprise, and 7.85 percent more than at a medium-sized enterprise. Large enterprises, which produce 66 percent of total sugar output, earn profits of 96.53 yuan per ton; medium-sized enterprises, which produce 32 percent of the output, earn 4.77 yuan per ton; and small enterprises, which produce 2 percent of the output, lose 56.07 yuan per ton. The fundamental reason for this is that in small and medium-sized enterprises, consumption, costs, losses, and waste are substantial. This is manifested as follows: 1) Large enterprises in Guangdong pay 7.32 yuan in wages per ton of sugar produced, medium-sized enterprises pay 18.27 yuan, and small enterprises pay 35.23 yuan. Small enterprises pay 3.8 times more for wages than do large enterprises; 2) For large enterprises in Heilongjiang, processing costs per ton of sugar are 180 yuan lower than they are for small and medium-sized enterprises; 3) Large enterprises in Guangdong consume 8.7 tons of cane for each ton of sugar produced, medium-sized enterprises consume 9.58 tons, and small enterprises consume 10.2 tons. For this item alone, medium-sized enterprises must expend 43.94 yuan more than large enterprises, and small enterprises must expend 74.96 yuan more than large enterprises. At the same time, small and medium-sized enterprises are not as amenable to multipurpose utilization, the benefits of which must not be underestimated. For example, in Guangdong the profit from one ton of medicinal yeast is

about the same as the profit from 8 tons of sugar; the profit from one ton of ethyl alcohol is about the same as that from 2 tons of sugar; and the profit from one ton of paper is about the same as that from 4 tons of sugar. And making these products depends upon multipurpose processing of by-products and wastes produced in sugar refining. For another example, some large sugar refineries in Heilongjiang, Nei Monggol, and Shanxi have imported equipment in recent years that will utilize discarded vegetable fibers to produce granular rice dregs for export to Japan. This product sells for \$150 per ton, but costs only 140 yuan renminbi, so it is very welcome. In the 1985-1986 production year, the output value of goods produced through multipurpose utilization in Guangdong accounted for 6.55 percent of sugar's gross output value, and the output value of goods produced through multipurpose utilization in large refineries accounted for 14.73 percent of sugar's gross output value. In plants successfully engaged in multipurpose utilization, 47.67 percent of total profits comes from processed goods other than sugar. These plants are earning profits of 40 yuan per ton through multipurpose utilization. In small plants, on the other hand, the output value of goods produced through multipurpose utilization accounts for only 2.15 percent of sugar's gross output value. With this kind of major input and insignificant output, limited raw materials will be unable to satisfy burgeoning demands.

In order to combat the above problems and the declining trend in sugar production, some comrades have set sugar production in opposition to grain production, believing that sugar production in China is not worthwhile. We cannot agree with this assessment.

What benefit is there in producing sugar in China? First let us look at the following accounts:

From January to November 1986, China imported 1,047,000 tons of unprocessed sugar, at a cost of \$189 million in foreign exchange. This was an average cost, insurance, and freight [C.I.F.] cost of \$180.60 per ton (comparable to the cost of unrefined sugar on the international free market, and \$74.40 less than the average \$255 C.I.F. cost for sugar imported during the Sixth 5-Year Plan), equivalent to 668.2 yuan renminbi per ton (figured at the list foreign exchange rate of 3.7 yuan renminbi to \$1). Expenses for loading and unloading, packaging, storage, and shipping come to 240 yuan per ton, which, added to the above figure, produces a total cost of 908.2 yuan per ton for imported unprocessed sugar. If we then convert the unprocessed sugar into granulated white sugar (1 ton of unprocessed sugar yields about 0.93 tons of granulated white sugar), then the cost of imported sugar is 991.5 yuan per ton. (If we add 200.5 yuan for import tariffs, the cost rises to 1,192 yuan per ton.) By contrast, in 1985 sugar produced in China cost 801.03 yuan per ton (cane sugar cost 728.69 yuan and beet sugar cost 1,127.91 yuan), or 6.4 percent less than imported sugar on the average. In Guangdong, for example, in the 1985-1986 production year sugar cost 916.47

yuan per ton to produce, as follows: the actual cost of sugarcane, including subsidies, was 72.72 yuan per ton, and 9.45 tons of sugarcane were consumed per ton of sugar, for a total of 687.2 yuan per ton. Processing costs amounted to 229.27 yuan, raising the total to 916.47 yuan per ton, and taxes added 220 yuan, for a final total of 1,136.47 yuan. Obviously, taxed or untaxed, sugar produced in China costs less than imported sugar.

Statistics produced through the 1984 National Agricultural Base Survey indicate that, based on the per-mu yields and international market prices for sugar and grain crops that year, for any given area of land, the foreign exchange returns on sugar produced from sugar crops were greater than foreign exchange returns on grain. That is, figuring the costs on equivalent parcels of land, using foreign exchange returns on sugar production to import grain is more worthwhile than using foreign exchange returns on grain production to import sugar.

Of course, "agriculture is the foundation of the national economy," and grain is the "bedrock" of that foundation, so grain production must have a firm domestic foothold. But at the same time we should also realize that sugar consumption is rising rapidly in China. In the 1950's and 1960's grain consumption was around 1 million tons per year. Now it has already soared to 6 million tons per year. It would be very difficult for a nation that uses so much sugar to rely upon imports. What's more, domestic conditions for sugar production are not at all poor. As described above, there is still a certain amount of unrealized potential in China's sugar-producing regions. The potential in dispersed farming regions is even more obvious: for example, in 1985 Zhejiang produced 4.09 tons of sugarcane per mu and Hunan produced 3.92 tons per mu, ranking second and third, respectively in national per-mu sugarcane yields. Qinghai, Gansu, and Ningxia produced per-mu sugar-beet yields of 4.27 tons, 2.2 tons, and 2.16 tons, respectively—yields which are equal to or higher than the world average of 2.16 tons per mu. Qinghai's per-mu sugar-beet yield is the world's highest. Developing sugar production in China will not only be essential, it will also be entirely feasible, so long as we accomplish the following tasks: We must work out a reasonable cultivation ratio for sugar and grain and handle the accompanying policy issues. We must tap the existing potential of sugar-producing regions, improve the yield per unit of land area, and actively develop sugar production in dispersed farming regions. In particular, we should develop regions which have great potential and few areas of conflict with grain production: for example, we should vigorously develop sugar beet production in northwestern regions. At the same time, we must reorganize small sugar refineries that are characterized by high consumption, high costs, low returns, and competition with large refineries over raw materials. And, we must put into place policies that will encourage sugar refineries to increase output, practice thrift, and increase returns by improving quality and intensifying processing.



From the situation abroad we can see that other large sugar-producing nations control sugar imports. Sugar imports in the United States must be discussed by Congress, and they bear a high tariff—five to ten times higher than in China. Each season the import surtax is readjusted, decided by the president. Sugar imports have decreased year after year, falling from 5 million tons in 1981 to 1.6-plus million tons today. Even though the price of sugar on the current international market has dropped, the United States has announced it will again decrease sugar imports 20 percent. In 1987 U.S. sugar imports will drop to 1.01 million tons, and two years later the nation will be self-sufficient in sugar. The purpose is to protect the domestic sugar industry and avoid the assault of international market fluctuations.

By developing sugar production in China, not only can we save a substantial quantity of foreign exchange, we can also increase profit taxes for the state by a large margin. At the same time, we can increase by-products and peasant incomes and solve employment problems. According to statistics supplied by engineers in the Ministry of Light Industry, for each million tons of sugar we produce, we can increase peasant net income 300 to 400 million yuan, raise industrial profit taxes 300 million yuan, accumulate 300 million yuan through multipurpose utilization of by-products, provide employment for 60,000 industrial workers, and stimulate the development of tertiary industry. In addition, for each ton of processed sugar by-products the state produces, we can withdraw 5,000 yuan of currency from circulation. This will play a certain role in controlling consumption-fund inflation, alleviating market pressure caused by over-apportionment in the national economy, and maintaining basic stability in commodity prices. For this reason, we need not doubt the benefits of Chinese sugar production: it is increasing production of raw materials that is the pressing problem.

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Table 1. Actual Prices for Sugar Crops in the 1986-1987  
Production Year  
Units: Yuan Per Ton

Sugarcane		Sugar Beets	
Region	Price	Region	Price
National Average	74.2	National Average	91.91
Guangdong	76.82	Heilongjiang	90
Guangxi	67.17	Jilin	90
Fujian	90	Liaoning	90
Yunnan	71.84	Nei Monggol	90
Sichuan	70	Xinjiang	90.97
Jiangxi	81.35	Gansu	90
Zhejiang	64.4	Ningxia	90
Guizhou	77	Shaanxi	87
		Hebei	90
		Shanxi	90
		Jiangsu	100
		Shandong	105

Source of Data: Statistics from the August 1987 National Working Conference on Commodity Pricing

Table 2. Historical Price Parities Between Sugar and Grain Crops  
Price Units: Yuan Per Dan

Year	Price of Sugarcane	Price of Long-grained Nonglutinous Rice	Sugarcane: Long-grained Nonglutinous Rice	Price of Sugar Beets	Price of Corn	Sugar Beets: Corn
1952	1.05	5.15	1:0.19	1.65	4.11	1:0.4
1953	1.03	5.78	1:0.178	1.88	5.35	1:0.34
1954	.04	5.76	1:0.18	1.88	5.32	1:0.35
1955	1.04	5.74	1:0.18	1.87	5.48	1:0.34
1956	1.09	5.84	1:0.187	1.87	5.57	1:0.336
1957	1.13	5.92	1:0.19	2	5.66	1:0.35
1958	1.13	6.11	1:0.185	2.03	5.97	1:0.34
1959	1.22	6.13	1:0.199	2.1	6.03	1:0.348
1960	1.23	6.39	1:0.192	2.13	6.11	1:0.35
1961	1.49	8.06	1:0.185	2.71	7.5	1:0.36
1962	1.4	8.14	1:0.17	2.71	7.61	1:0.356
1963	1.4	8.13	1:0.172	2.71	7.27	1:0.37
1964	1.5	8.13	1:0.185	2.73	7.34	1:0.37
1965	1.5	8.33	1:0.18	2.73	7.43	1:0.367
1966	1.5	9.51	1:0.158	2.73	8.91	1:0.31
1967	1.5	9.51	1:0.158	2.73	8.81	1:0.31
1968	1.5	9.52	1:0.158	2.73	8.86	1:0.31

Table 2. Historical Price Parities Between Sugar and Grain Crops  
Price Units: Yuan Per Dan

Year	Price of Sugarcane	Price of Long-grained Nonglutinous Rice	Sugarcane: Long-grained Nonglutinous Rice	Price of Sugar Beets	Price of Corn	Sugar Beets: Corn
1969	1.5	9.52	1:0.158	2.73	8.75	1:0.31
1970	1.5	9.52	1:0.158	2.73	8.87	1:0.31
1971	1.73	9.52	1:0.182	2.73	8.8	1:0.31
1972	1.73	9.52	1:0.182	3	8.87	1:0.34
1973	1.73	9.52	1:0.182	3	8.8	1:0.34
1974	1.73	9.52	1:0.182	3	8.73	1:0.34
1975	1.73	9.52	1:0.182	3	8.74	1:0.34
1976	1.73	9.52	1:0.182	3	8.76	1:0.34
1977	1.73	9.52	1:0.182	3	8.87	1:0.34
1978	1.73	10.31	1:0.168	3	9.49	1:0.316
1979	2.186	13.69	1:0.16	3.81	12.65	1:0.301
1980	2.515	13.97	1:0.182	4.26	12.98	1:0.33
1981	2.7	14.12	1:0.19	4.35	13.21	1:0.33
1982	2.5	14.19	1:0.176	4.27	13.4	1:0.32
1983	2.67	15.19	1:0.176	4.325	14.14	1:0.31
1984	3.03	15.65	1:0.194	3.93	14.67	1:0.27
1985	3.33	15.66	1:0.212	4.435	14.66	1:0.302

Note: 1. Post-1980 sugarcane and sugar beet prices are the average composite procurement price. 2. Source of data: Extracted from pertinent Ministry of Commerce data.

Table 3. Sugar Content of Sugar Crops in China in Recent Years (%)

Region	Sugarcane		Region	Sugar Beets	
	1984	1985		1984	1985
Guangdong	13	12.92	Heilongjiang	14.8	14.62
Guangxi	13.2	13.35	Nei Monggol	16.26	15.58
Fujian	13.27	12.96	Jilin	15.03	13.18
Yunnan	13.58	13.39	Xinjiang	16.78	17.16
Sichuan	12.5	12.05	Ningxia	16.36	14.76
Jiangxi	12.5	11.62	Gansu	16.6	16.65

Source of data: Supplied by the Ministry of Light Industry

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### Jute, Ambari Prices Allowed To Rise

40060186a Beijing JINGJI RIBAO in Chinese  
19 Mar 88 p 3

[Article by trainee Zhou Yong [0719 3144]: "Joint Circular by the State Administration of Commodity Prices and the Ministry of Commerce Announces that Jute and Ambari Purchase Prices May Rise in Some Areas"]

[Text] The State Administration of Commodity Prices and the Ministry of Commerce recently issued a joint circular setting the 1988 guidance purchase prices for jute and ambari in order to stabilize production.

Jute and ambari acreage has been cut repeatedly in the last two years, and gross yield has declined. In order to stabilize production, relevant departments in 1987 decreed that jute and ambari purchase prices would be allowed to float above the 1986 base price at a range equal to that at which prices for grain are allowed to float

above the fixed grain procurement price in the same locality. Actual prices rose on the average approximately 9 percent; the price for 50 kg of grade 2 jute and grade 2 ambari rose to 58 yuan and 50 yuan, respectively. But hemp production was quite uneven among various districts, and in some areas it was not sufficiently stable.

Planned production for jute and ambari in 1988 is 850,000 tons nationwide, but experts involved in hemp production feel that this goal will be extremely difficult to reach. How then should the 1988 purchase price for jute and ambari be determined? The State Administration of Commodity Prices and the Ministry of Commerce each listened to the views of the major hemp-producing provinces and issued the following guidelines based on the different production and marketing situations of the various provinces. In areas where production is stable and supply and demand essentially normal, 1987 actual prices should be used and generally should not be allowed to rise further. In areas where production has dropped and the supply is strained, prices may rise to 15 percent above the 1987 price.

The circular emphasized that as each locality sets hemp prices, following the guidelines, they should be very sensitive to trends in the relation between production, buying, and selling and should be very careful to balance the relations. The circular also stressed that we must see that prices play an active role in encouraging steady production and heed the lessons of the previous few years, during which prices skyrocketed and there was panic-buying when demand outstripped supply, and prices were slashed and no one wanted to buy when supply exceeded demand.

12513

#### **Hainan Meeting Discusses Grain Imports**

HK3004060788 Haikou Hainan Provincial Service in Mandarin 0300 GMT 28 Apr 88

[Excerpts] Arrangements have been made for Hainan Province's grain imports from the mainland this year. The province will ship in or buy at negotiated prices a total of 540,000 tons of grain. The grain shortage in the province will thus be eased.

The provincial government held a forum on coordination of grain shipments on 25 and 26 April, to get a good grasp of firming up this work. During the 3 years from the beginning of 1986 to 1988, the state has been implementing a contract system for grain shipments to Hainan, with the unified arrangements made by Guangdong Province. Following the establishment of Hainan Province, the grain shipments will be directly arranged by the central authorities. From 1988 to 1990, the province plans to ship in 550 million jin of grain a year.

This year the province's grain stocks are very meager, and there is shortage of supply. In order to ensure sufficient grain for the people and support the province's

development and construction, the central authorities are shipping in 540,000 tons of grain to meet the requirements. This includes 230,000 tons of grain bought at par, 110,000 tons bought at negotiated prices and sold at par, and 200,000 tons bought and sold at negotiated prices.

#### **Henan Tobacco Area**

40060233c Beijing JINGJI CANKAO in Chinese  
7 Mar 88 p 2

[Excerpt] According to a January survey of 7,740 rural households in 60 counties in Henan Province, 1,762 mu will be sown to tobacco in 1988, a 33.3 percent increase over 1987.

#### **Hunan Crop Area**

40060233d Beijing JINGJI CANKAO in Chinese  
16 Mar 88 p 1

[Excerpts] According to a survey of 3,780 rural households in 37 counties in Hunan Province, 32,000 mu will be sown to grain in 1988, a 2.5 percent increase over 1987; 5094.3 [as published] mu will be sown to cash crops, a 5.6 percent increase over 1987. Over the past two years, ramie output in Hunan has exceeded demand and the price has decreased from 20 yuan to 24 yuan per kilogram in 1986 to 1.8 yuan this year, but the procurement price for 100 kilograms of cotton has increased 12 yuan over 1987.

#### **Shandong Tobacco Area**

40060233e Jinan NONGYE ZHISHI in Chinese No 5,  
5 Mar 88 p 5

[Excerpt] In 1988 the state plan calls for Shandong Province to sow 1,280,000 mu to tobacco and the state will procure 3,750,000 dan of tobacco.



**Taipei Paper Reports Sharp Rise in Imports  
During January, February**

40060209 Taipei CHING-CHI JIH-PAO in Chinese  
6 Mar 88 p 1

[Text] Imports and exports totalled \$16,356,200,000 in January and February, an increase of 40.5 percent over the same period last year, according to customs figures. Of this, exports amounted to \$9,206,100,000 and imports \$7,150,100,000, up 60.3 percent, for a surplus of \$2,056,000,000.

Exports rose 11.8 percent to \$4,309,110,000 in February, while imports shot up 30.9 percent to \$3,315,100,000, for a surplus of over \$990,000,000.

In new Taiwan dollars, imports and exports totalled NT\$467,410,000,000 in January and February this year, up 13.9 percent over the same period in 1987. Of this, exports were valued at NT\$262,680,000,000, an increase of 3.9

percent, and imports NT\$204,730,000,000, up 30.1 percent, for a surplus of NT\$57,950,000,000. As far as February is concerned, exports dropped 8.7 percent to NT\$123,010,000,000, while imports rose 6.9 percent to NT\$95,010,000,000, for a surplus of NT\$28,060,000,000.

Turning to major trading partners, the U.S. topped the list of Taiwan markets, taking \$3,847,100,000 worth of Taiwan exports, or 41.8 percent of the total, followed by Europe and Japan, which imported \$1,569,500,000 and \$1,232,600,000 worth of goods, or 17 percent and 13.4 percent, respectively.

The U.S. topped the list of countries exporting to Taiwan, accounting for \$2,179,000,000, or 30.5 percent, of all Taiwan imports. Japan accounted for \$2,072,400,000 of Taiwan imports, or 29 percent, followed by Europe with \$1,004,000,000, or 14 percent.

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